All.6.6 Serbatoi giornalieri.

- Certificati di conformità.
- Certificati di controllo-collaudo
- Scheda tecnica pompe.
- Scheda tecnica serbatoio e accessori.
- Scheda tecnica elettrovalvole.
- Scheda tecnica valvola antincendio blocco combustibile.

ROTATRON INDUSTRIE
Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
E-mail: rotatron-industrie@sfr.fr
www.rotatron-industrie.com

CERTIFICAT OF CONFORMITY
ESTABLISH BY THE SUPPLIER
IN ACCORDANCE TO THE ORDER
AND THE NORM NF L 00-015 B

N° **CC 056 / 21**
N° *RC 56 / 21*
Procédure D 027

CUSTOMER **ENERIA**
Affair ***DC 10 MILAN***

Number : **2103056**
Date of order : **26 03 2021**
N°of order : **00DCSD-1412** 484

description **500L**
type **50 BAL2 SP1** **LEFT**
Air testing : **0,3bar**

iron specifications Laminated steel S235 JR standard NF EN 10051, sheet thickness in: 2 mm
Manufacturing Respect of the folds for the stiffening of the sheets, electric welding No angular assembly or sharp angle

Equipement : **electric gauge, Leak detector electric and manual pumps**

Corrosion protection : Antirust plus paint finish
Marking manufacturer's plate, tank ref, test pressure and max pressure
Manufacturing date

Date of control **x 10/05/2021**
Number and date of delivery note: **N°** **B2105066** **x 25/05/2021**

We certify that the cited supply has been manufactured in accordance with technical specifications of the market,orders and subcommands and NF M88-940 and NF E 86-255 norms.
All control and test operations have been carried out and it accords to all the required specifications.

Information specific to the supplies and accessories delivered:

Our tanks are not intended to be buried, nor to be installed outside (except specific models and designed as such)

Supplier control

Name and function **Marc TESSON** **Workshop manager**

Date: **25/05/2021**

Signature:

Eventuellement visa et date du service de surveillance ou du bureau VERITAS

ROTATRON INDUSTRIE

D 018 / Ind H

MONITORING REPORT

RC 56 /21

Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
E-mail: rotatron-industrie@sfr.fr www.rotatron-industrie.com

CLIENT :	**ENERIA DC 10 MILAN**	**SUPPLIES**	Doc attached to the N°QO12 procedure
N° OF:	**2 103 056**	**DAY TANK**	Number of Pieces: **2**
Date :	**26/03/2021**		% of controlled pieces 100%
ORDER N°:	**00DCSD-1412484**		

DESIGNATION TYPE		**NUMBER**	**COMMENTS**
DAY TANK			
Type	**50 BAL2 SP1**	500,00 L	
Level gauge CF4 - 5 electrical contacts	1	-	
Leak detector CF30	1	-	
électropump tri 380v CKR90-E	2	-	
manual pump DN 25	1	-	
		-	
		-	
		-	
		-	
0		-	
		-	
Visual appearance control : accessories and tank.			
Dry control test			

TIGHTNESS according with NF M 88 - 940 norm

1-Dye penetrant for the retention tray		X
2- Tank		
welded zone with soapy water air testing	0,3 bars	X
	0,4 bars	-
3- Piping network and joints		
with soapy water air testing	0,3 bars	X
	0,4 bars	

VISUAL APPEARANCE

Sheet metal: NOTHING TO REPORT

Welded zone : NOTHING TO REPORT

Accessories : NOTHING TO REPORT

Aspects: NOTHING TO REPORT

Color :NOTHING TO REPORT

Thickness:NOTHING TO REPORT

RECORD OF CONTROL

DATE: 25/05/2021

Refused	accepted
	X

Marc Tesson

ROTATRON INDUSTRIE
Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
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E-mail: rotatron-industrie@sfr.fr
www.rotatron-industrie.com

CERTIFICAT OF CONFORMITY
ESTABLISH BY THE SUPPLIER
IN ACCORDANCE TO THE ORDER
AND THE NORM NF L 00-015 B

N° **CC 057 / 21**
N° *RC 57 / 21*
Procédure D 027

CUSTOMER **ENERIA**
Affair ***DC 10 MILAN***

Number : **2103057**
Date of order : **26 03 2021**
N°of order : **00DCSD-1412** 484

description **500L**
type **50 BAL2 SP1** **LEFT**
Air testing : **0,3bar**

iron specifications Laminated steel S235 JR standard NF EN 10051, sheet thickness in: 2 mm
Manufacturing Respect of the folds for the stiffening of the sheets, electric welding No angular assembly or sharp angle

Equipement : **electric gauge, Leak detector electric and manual pumps**

Corrosion protection : Antirust plus paint finish
Marking manufacturer's plate, tank ref, test pressure and max pressure
Manufacturing date

Date of control **x 10/05/2021**
Number and date of delivery note: **N°** **B2105066** **x 25/05/2021**

We certify that the cited supply has been manufactured in accordance with technical specifications of the market,orders and subcommands and NF M88-940 and NF E 86-255 norms.
All control and test operations have been carried out and it accords to all the required specifications.

Information specific to the supplies and accessories delivered:

Our tanks are not intended to be buried, nor to be installed outside (except specific models and designed as such)

Supplier control

Name and function **Marc TESSON** **Workshop manager**

Date: **25/05/2021**

Signature:

Eventuellement visa et date du service de surveillance ou du bureau VERITAS

ROTATRON INDUSTRIE

D 018 / Ind H

MONITORING REPORT

RC 57 /21

Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
E-mail: rotatron-industrie@sfr.fr www.rotatron-industrie.com

CLIENT :	**ENERIA DC 10 MILAN**	**SUPPLIES**	Doc attached to the N°QO12 procedure
N° OF:	**2 103 057**	**DAY TANK**	Number of Pieces: **2**
Date :	**26/03/2021**		% of controlled pieces 100%
ORDER N°:	**00DCSD-1412484**		

DESIGNATION TYPE		**NUMBER**	**COMMENTS**

TIGHTNESS according with NF M 88 - 940 norm

DAY TANK			**1-Dye penetrant for the retention tray**		X
Type	**50 BAL2 SP1**	500,00 L			
Level gauge CF4 - 5 electrical contacts	1	-			
Leak detector CF30	1	-			
électropump tri 380v CKR90-E	2	-	**2- Tank**		
manual pump DN 25	1	-	welded zone		
		-	with soapy water		
		-	air testing	0,3 bars	X
		-		0,4 bars	-
		-			
0		-			
		-	**3- Piping network and joints**		
			with soapy water		
			air testing	0,3 bars	X
				0,4 bars	
Visual appearance control : accessories and tank.					
Dry control test					

VISUAL APPEARANCE

Sheet metal: NOTHING TO REPORT

Welded zone : NOTHING TO REPORT

Accessories : NOTHING TO REPORT

Aspects: NOTHING TO REPORT

Color :NOTHING TO REPORT

Thickness:NOTHING TO REPORT

RECORD OF CONTROL	DATE: 25/05/2021	Refused	accepted
Marc Tesson			X

ROTATRON INDUSTRIE
Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
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www.rotatron-industrie.com

CERTIFICAT OF CONFORMITY
ESTABLISH BY THE SUPPLIER
IN ACCORDANCE TO THE ORDER
AND THE NORM NF L 00-015 B

N° **CC 058 / 21**
N° *RC 58 / 21*
Procédure D 027

CUSTOMER **ENERIA**
Affair ***DC 10 MILAN***

Number : **2103058**
Date of order : **26 03 2021**
N°of order : **00DCSD-1412** 484

description **500L**
type **50 BAL2 SP1** **RIGHT**
Air testing : **0,3bar**

iron specifications Laminated steel S235 JR standard NF EN 10051, sheet thickness in: 2 mm
Manufacturing Respect of the folds for the stiffening of the sheets, electric welding No angular assembly or sharp angle

Equipement : **electric gauge, Leak detector electric and manual pumps**

Corrosion protection : Antirust plus paint finish
Marking manufacturer's plate, tank ref, test pressure and max pressure
Manufacturing date

Date of control **x 10/05/2021**
Number and date of delivery note: **N°** **B2105066** **x 25/05/2021**

We certify that the cited supply has been manufactured in accordance with technical specifications of the market,orders and subcommands and NF M88-940 and NF E 86-255 norms.
All control and test operations have been carried out and it accords to all the required specifications.

Information specific to the supplies and accessories delivered:

Our tanks are not intended to be buried, nor to be installed outside (except specific models and designed as such)

Supplier control

Name and function **Marc TESSON** **Workshop manager**

Date: **25/05/2021**

Signature:

Eventuellement visa et date du service de surveillance ou du bureau VERITAS

ROTATRON INDUSTRIE

D 018 / Ind H

MONITORING REPORT

RC 58 /21

Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
E-mail: rotatron-industrie@sfr.fr www.rotatron-industrie.com

CLIENT :	**ENERIA DC 10 MILAN**	**SUPPLIES**	Doc attached to the N°QO12 procedure
N° OF:	**2 103 058**	**DAY TANK**	Number of Pieces: **2**
Date :	**26/03/2021**		% of controlled pieces 100%
ORDER N°:	**00DCSD-1412484**		

DESIGNATION TYPE		**NUMBER**	**COMMENTS**

TIGHTNESS according with NF M 88 - 940 norm

DAY TANK					
Type	**50 BAL2 SP1**	500,00 L	**1-Dye penetrant for the retention tray**		X
Level gauge CF4 - 5 electrical contacts	1	-			
Leak detector CF30	1	-			
électropump tri 380v CKR90-E	2	-	**2- Tank**		
manual pump DN 25	1	-	welded zone		
		-	with soapy water		
		-	air testing	0,3 bars	X
		-		0,4 bars	-
		-			
0		-			
		-	**3- Piping network and joints**		
			with soapy water		
			air testing	0,3 bars	X
				0,4 bars	
Visual appearance control : accessories and tank.					
Dry control test					

VISUAL APPEARANCE

Sheet metal: NOTHING TO REPORT

Welded zone : NOTHING TO REPORT

Accessories : NOTHING TO REPORT

Aspects: NOTHING TO REPORT

Color :NOTHING TO REPORT

Thickness:NOTHING TO REPORT

RECORD OF CONTROL

DATE: 25/05/2021

Refused	accepted
	X

Marc Tesson

ROTATRON INDUSTRIE
Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
E-mail: rotatron-industrie@sfr.fr
www.rotatron-industrie.com

CERTIFICAT OF CONFORMITY
ESTABLISH BY THE SUPPLIER
IN ACCORDANCE TO THE ORDER
AND THE NORM NF L 00-015 B

N° **CC 059 / 21**
N° *RC 59 / 21*
Procédure D 027

CUSTOMER **ENERIA**
Affair ***DC 10 MILAN***

Number : **2103059**
Date of order : **26 03 2021**
N°of order : **00DCSD-1412** 484

description **500L**
type **50 BAL2 SP1** **RIGHT**
Air testing : **0,3bar**

iron specifications Laminated steel S235 JR standard NF EN 10051, sheet thickness in: 2 mm
Manufacturing Respect of the folds for the stiffening of the sheets, electric welding No angular assembly or sharp angle

Equipement : **electric gauge, Leak detector electric and manual pumps**

Corrosion protection : Antirust plus paint finish
Marking manufacturer's plate, tank ref, test pressure and max pressure
Manufacturing date

Date of control **x 10/05/2021**
Number and date of delivery note: **N°** **B2105066** **x 25/05/2021**

We certify that the cited supply has been manufactured in accordance with technical specifications of the market,orders and subcommands and NF M88-940 and NF E 86-255 norms.
All control and test operations have been carried out and it accords to all the required specifications.

Information specific to the supplies and accessories delivered:

Our tanks are not intended to be buried, nor to be installed outside (except specific models and designed as such)

Supplier control

Name and function **Marc TESSON** **Workshop manager**

Date: **25/05/2021**

Signature:

Eventuellement visa et date du service de surveillance ou du bureau VERITAS

ROTATRON INDUSTRIE

D 018 / Ind H

MONITORING REPORT

RC 59 /21

Route des bois Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
E-mail: rotatron-industrie@sfr.fr www.rotatron-industrie.com

CLIENT :	**ENERIA DC 10 MILAN**	**SUPPLIES**	Doc attached to the N°QO12 procedure
N° OF:	**2 103 059**	**DAY TANK**	Number of Pieces: **2**
Date :	**26/03/2021**		% of controlled pieces 100%
ORDER N°:	**00DCSD-1412484**		

DESIGNATION TYPE		**NUMBER**	**COMMENTS**

TIGHTNESS according with NF M 88 - 940 norm

DAY TANK			**1-Dye penetrant for the retention tray**		X
Type	**50 BAL2 SP1**	500,00 L			
Level gauge CF4 - 5 electrical contacts	1	-			
Leak detector CF30	1	-			
électropump tri 380v CKR90-E	2	-	**2- Tank**		
manual pump DN 25	1	-	welded zone		
		-	with soapy water		
		-	air testing	0,3 bars	X
		-		0,4 bars	-
		-			
0		-			
		-	**3- Piping network and joints**		
			with soapy water		
			air testing	0,3 bars	X
				0,4 bars	
Visual appearance control : accessories and tank.					
Dry control test					

VISUAL APPEARANCE

Sheet metal: NOTHING TO REPORT

Welded zone : NOTHING TO REPORT

Accessories : NOTHING TO REPORT

Aspects: NOTHING TO REPORT

Color :NOTHING TO REPORT

Thickness:NOTHING TO REPORT

RECORD OF CONTROL

DATE: 25/05/2021

Refused	accepted
	X

Marc Tesson

Proprietà

DATA 4 ITALY

Progetto

DC 10
MILAN

Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	15/10/2021	DOE

DATA 4 ITALY - DC10

Fiche technique Pompe electrique / Electric pump Datasheet

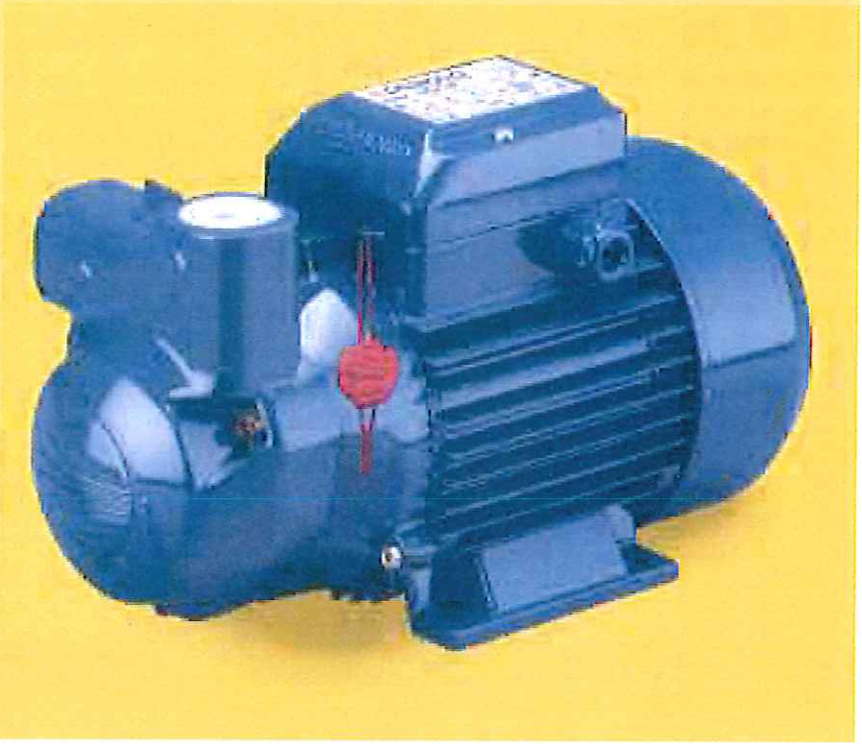
Scheda Pompa elettrica

CKR

électropompes auto-amorçantes à anneau liquide

à double surface d'usure frontale antiblocage

Sécurité d'amorçage et garantie de démarrage, même après de longues périodes d'inactivité, grâce à deux surfaces frontales antiblocage, devant la roue, empêchant la formation de rouille.



PLAGES D'UTILISATION

Débit maxi 50 l/min (3 m³/h)
Hauteur manométrique totale jusqu'à 54 m

LIMITES D'UTILISATION

Hauteur manométrique d'aspiration jusqu'à 9 m
Température du liquide maxi + 90°C (+ 55°C pour gazole/mazout)
Température ambiante maxi + 40°C

RÉALISATION ET NORMES DE SÉCURITÉ

EN 60 335-1	EN 60034-1	CE
IEC 335-1	IEC 34-1	
CEI 61-150	CEI 2-3	

UTILISATIONS ET INSTALLATIONS

CONSEILLÉES POUR POMPER DE L'EAU PROPRE OU DES LIQUIDES SANS PARTICULES ABRASIVES AINSI QUE DES LIQUIDES CHIMIQUEMENT NEUTRES VIS-À-VIS DES MATÉRIAUX DE LA POMPE.
GRÂCE À LEUR PRINCIPE DE FONCTIONNEMENT, CES POMPES CONSTITUENT UNE EXCELLENTE SOLUTION LORSQU'ON A BESOIN DE POMPES AUTO-AMORÇANTES COMPACTES OU QUE LE FLUX DU LIQUIDE EST FAIBLE OU IRRÉGULIER OU ENCORE CONTIENT DE L'AIR.
Elles doivent être installées dans des lieux fermés ou protégés des intempéries.

GARANTIE 2 ANS selon nos conditions générales de vente.

CARACTÉRISTIQUES DE CONSTRUCTION

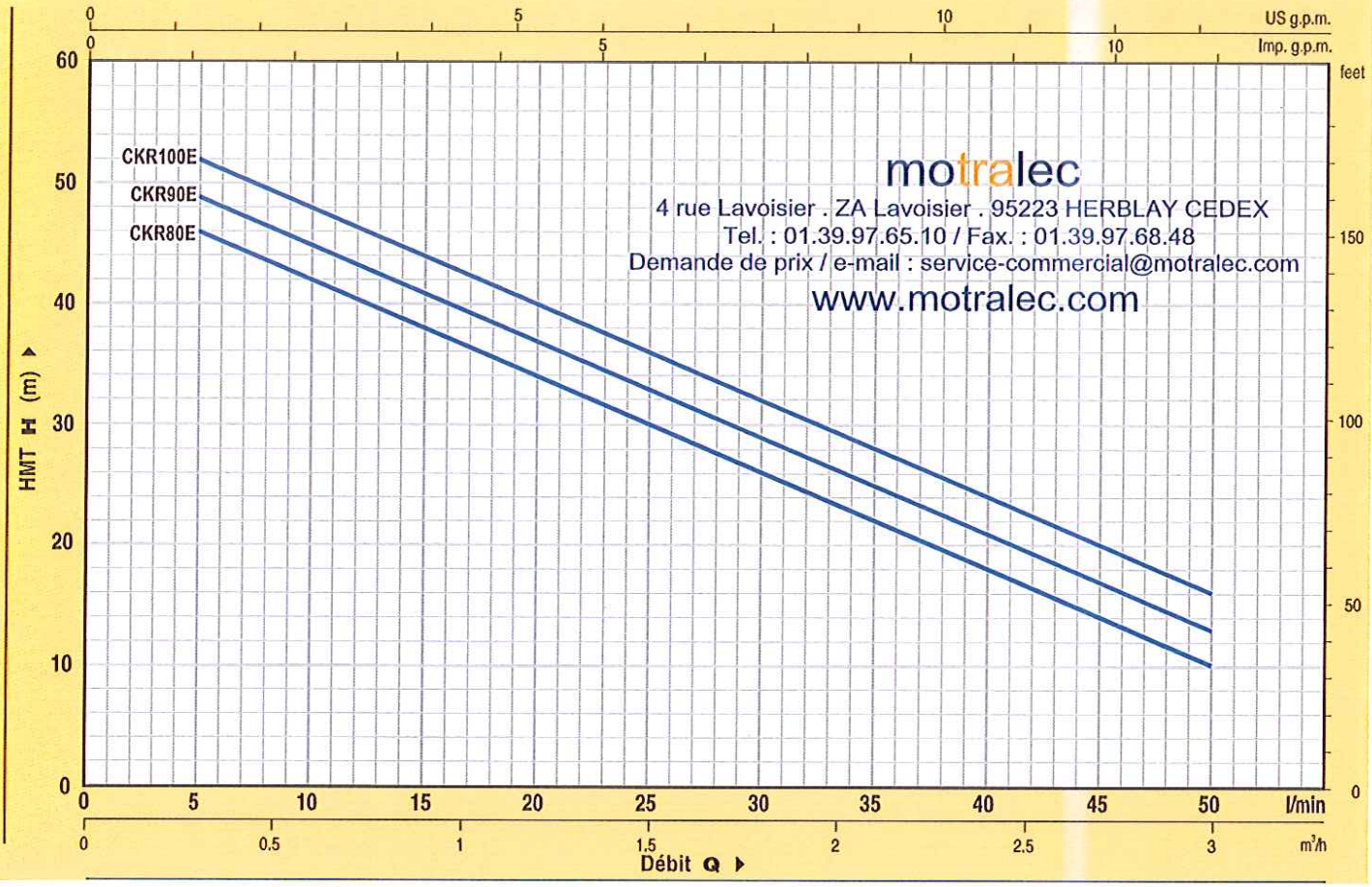
- **CORPS POMPE: fonte**, avec surface d'usure en **acier inox** afin de prévenir le blocage de la roue dû à l'oxydation. Il est doté d'orifices taraudés ISO 228/1.
- **LANTERNE (brevet nº 1289150): aluminium** avec surface d'usure frontale en **laiton**; élimine les difficultés de démarrage dues au blocage de la roue après de longues périodes d'inactivité.
- **ROUE: laiton,** du type en étoile avec aubes radiales ouvertes.
- **ARBRE MOTEUR: acier inox EN 10088-3 - 1.4104.**
- **GARNITURE MÉCANIQUE: céramique - graphite - VITON.**
- **MOTEUR ÉLECTRIQUE:** les pompes sont couplées à un moteur électrique PEDROLLO spécialement dimensionné, silencieux, fermé, avec ventilation extérieure, adapté pour le service continu.
  CKRm: monophasé 230 V - 50 Hz avec condensateur et protection thermique intégrée au bobinage.
  CKR: triphasé 230/400 V - 50 Hz.
- **ISOLATION:** classe F. • **PROTECTION:** IP 44.
- **MODÈLE DÉPOSÉ.**

VERSION SUR DEMANDE

⇒ **CKRm/INT** électropompes avec interrupteur et cordon d'alimentation avec fiche Schuko;
⇒ garniture mécanique spéciale;
⇒ autres tensions ou fréquence de 60 Hz;
⇒ protection IP 55.

NOTA : la hauteur manométrique d'aspiration est plutôt de 7m, celle de 9m donnéee par Pedrollo est très optimiste. ROTATRON.

COURBES ET CARACTÉRISTIQUES À n= 2900 tr/min



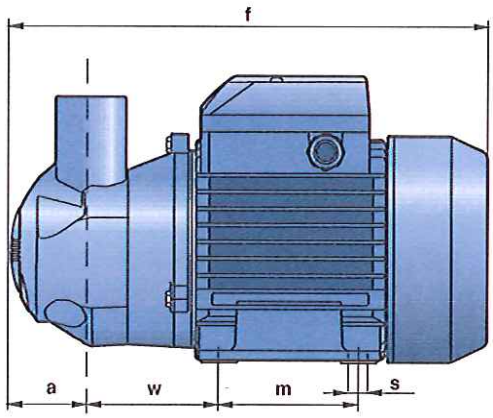
motralec
4 rue Lavoisier . ZA Lavoisier . 95223 HERBLAY CEDEX
Tel. : 01.39.97.65.10 / Fax. : 01.39.97.68.48
Demande de prix / e-mail : service-commercial@motralec.com
www.motralec.com

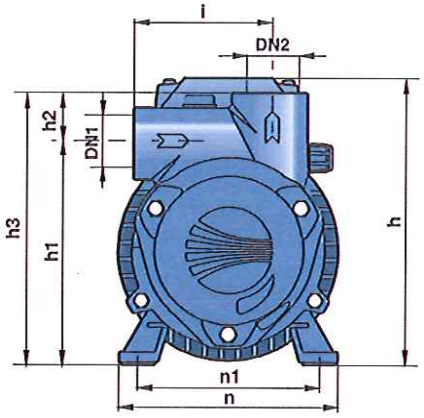
TYPE		PUISSANCE		Q										
Monophasé	Triphasé	kW	HP	m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
				l/min	0	5	10	15	20	25	30	35	40	50
CKRm 80-E	CKR 80-E	0.60	0.85	H mètres	48	46	42	38	34	30	26	22	18	10
CKRm 90-E	CKR 90-E	0.75	1		51	49	45	41	37	33	29	25	21	13
CKRm 100-E	CKR 100-E	0.90	1.25		54	52	48	44	40	36	32	28	24	16

Q = Débit **H** = Hauteur manométrique totale

Tolérance des courbes selon EN ISO 9906 Ann. A.

DIMENSIONS ET POIDS





TYPE		ORIFICES		DIMENSIONS mm												kg	
Monophasé	Triphasé	DN1	DN2	a	f	h	h1	h2	h3	i	m	n	n1	w	s	1~	3~
CKRm 80-E	CKR 80-E	1"	1"	50	296	179	136	31	167	81	90	134	112	77	7	11.6	10.8
CKRm 90-E	CKR 90-E															11.8	11.0
CKRm 100-E	CKR 100-E															11.8	12.0

CKR

Self-priming liquid ring pumps

With double anti-seize frontal inserts

Clean water
Civil use
Industrial use
Agricultural use

PERFORMANCE RANGE

- Flow rate up to **50 l/min** (3 m^3/h)
- Head up to **51 m**

APPLICATION LIMITS

- Manometric suction lift up to **9 m** (HS)
- Liquid temperature between **-10 °C** and **+90 °C**
- Ambient temperature up to **+40 °C**
- Max. working pressure **6 bar**
- Continuous service **S1**

CONSTRUCTION AND SAFETY STANDARDS

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3

CE

CERTIFICATIONS

Company with management system certified DNV
ISO 9001: QUALITY

INSTALLATION AND USE

Suitable for use with clean water that does not contain abrasive particles and with liquids that are not chemically aggressive towards the materials from which the pump is made.
Because of a specific principle of their operating performance these pumps are an excellent solution in every case where a compact self-priming pump is required or when the fluid flow is irregular or contains air.
Installation needs to be undertaken in well ventilated closed areas or anyway protected from bad weather.

PATENTS - TRADE MARKS - MODELS

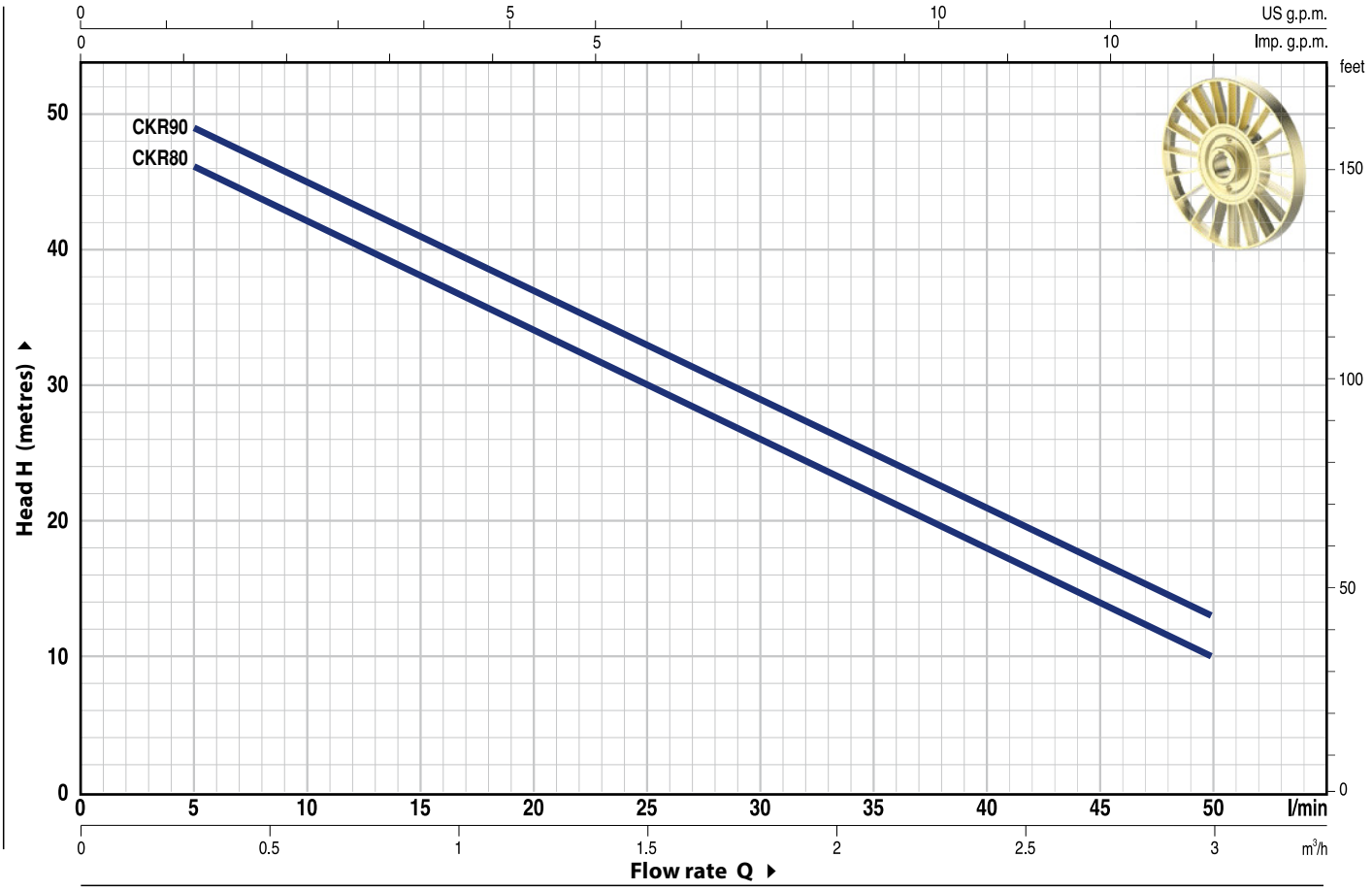
- Motor bracket: patent n. IT1243605
- Registered EU Design n. 342159-0008

OPTIONS AVAILABLE ON REQUEST

- Special mechanical seal
- Other voltages
- IP X5 class protection

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz **n= 2900 min^{-1}** HS= 0 m



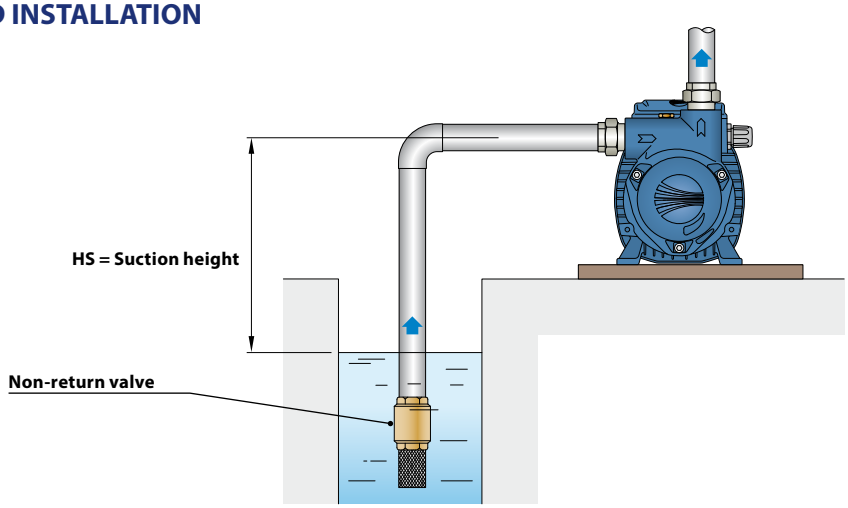
MODEL		POWER (P2)			Q	m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
Single-phase	**Three-phase**	**kW**	**HP**	▲		l/min	**0**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**50**
CKRm 80	**CKR 80**	0.55	0.75	**IE3**	**H**	metres	48	46	42	38	34	30	26	22	18	10
CKRm 90	**CKR 90**	0.75	1				51	49	45	41	37	33	29	25	21	13

Q = Flow rate **H** = Total manometric head **HS** = Suction height

Tolerance of characteristic curves in compliance with EN ISO 9906 Grade 3B.

▲ Three-phase motor efficiency class (IEC 60034-30-1)

STANDARD INSTALLATION



POS.	COMPONENT	CONSTRUCTION CHARACTERISTICS
1	**PUMP BODY**	Cast iron with stainless steel insert to prevent impeller seizure due to the formation of rust . The pump body is complete with threaded ports in compliance with ISO 228/1
2	**MOTOR BRACKET**	Aluminium with brass insert (patented), reduces the risk of impeller seizure
3	**IMPELLER**	Brass star type with open radial vanes
4	**MOTOR SHAFT**	Stainless steel AISI 431

5 MECHANICAL SEAL

Seal	*Shaft*	*Materials*		
Model	*Diameter*	*Stationary ring*	*Rotational ring*	*Elastomer*
AR-12V	**Ø 12** mm	Ceramic	Graphite	Viton

6 BEARINGS **6203 ZZ / 6203 ZZ**

7 CAPACITOR

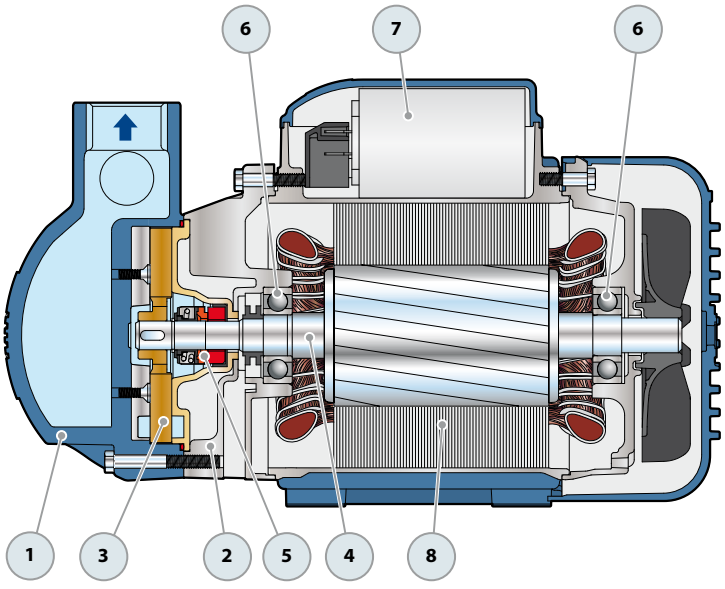
Pump	*Capacitance*	
Single-phase	*(230 V or 240 V)*	*(110 V)*
CKRm 80	**16** µF - 450 VL	**60** µF - 300 VL
CKRm 90	**20** µF - 450 VL	**60** µF - 300 VL

8 ELECTRIC MOTOR

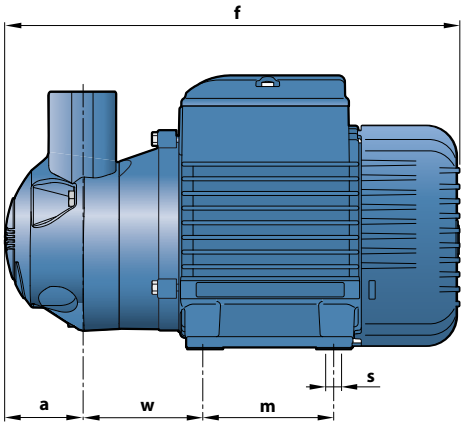
CKRm: single-phase 230 V - 50 Hz with thermal overload protector incorporated into the winding.
CKR: three-phase 230/400 V - 50 Hz.

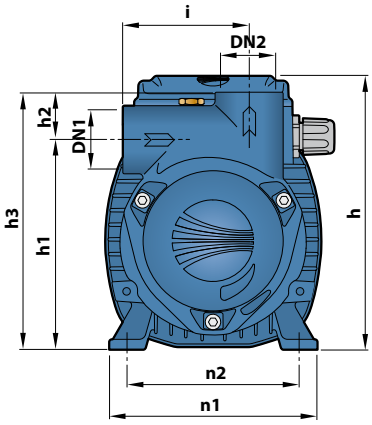
➠ **The three-phase pumps are fitted with high performance motors in class IE3 (IEC 60034-30-1)**

– Insulation: class F
– Protection: IP X4



DIMENSIONS AND WEIGHT





MODEL		PORTS		DIMENSIONS mm												kg	
Single-phase	**Three-phase**	**DN1**	**DN2**	a	f	h	h1	h2	h3	i	m	n1	n2	w	s	1~	3~
CKRm 80	**CKR 80**	**1"**	**1"**	50	296	180	136	31	167	81	90	140	112	77	7	**10.9**	**10.9**
CKRm 90	**CKR 90**															**10.8**	**10.8**

ABSORPTION

MODEL	VOLTAGE		
Single-phase	230 V	240 V	110 V
CKRm 80	**5.0** A	**4.8** A	**10.0** A
CKRm 90	**5.1** A	**4.9** A	**10.2** A

MODEL	VOLTAGE					
Three-phase	230 V	400 V	690 V	240 V	415 V	720 V
CKR 80	**3.5** A	**2.0** A	**1.2** A	**3.3** A	**1.9** A	**1.1** A
CKR 90	**3.6** A	**2.1** A	**1.2** A	**3.5** A	**2.0** A	**1.2** A

CKR

Elettropompe autoadescanti ad anello liquido

Con doppio rasamento frontale antibloccaggio

Acque pulite
Uso civile
Uso industriale
Uso agricolo

CAMPO DELLE PRESTAZIONI

- Portata fino a **50 l/min** (3 m^3/h)
- Prevalenza fino a **51 m**

LIMITI D'IMPIEGO

- Altezza d'aspirazione manometrica fino a **9 m** (HS)
- Temperatura del liquido da **-10 °C** fino a **+90 °C**
- Temperatura ambiente fino a **+40 °C**
- Pressione max nel corpo pompa **6 bar**
- Servizio continuo **S1**

ESECUZIONE E NORME DI SICUREZZA

EN 60335-1
IEC 60335-1
CEI 61-150

EN 60034-1
IEC 60034-1
CEI 2-3

CE

CERTIFICAZIONI

Azienda con sistema di gestione certificato DNV
ISO 9001: QUALITÀ

UTILIZZI E INSTALLAZIONI

Sono consigliate per pompare acqua pulita senza particelle abrasive e liquidi chimicamente non aggressivi per i materiali costituenti la pompa.
Grazie allo specifico principio di funzionamento costituiscono una felice soluzione in tutti i casi in cui sia richiesta una pompa autoadescante compatta oppure quando il flusso del liquido sia irregolare o miscelato con aria.
L'installazione è da effettuarsi in luoghi chiusi ben arieggiati o comunque protetti dalle intemperie.

BREVETTI - MARCHI - MODELLI

- Lanterna: brevetto n° IT1243605
- Modello comunitario registrato n° 342159-0008

ESECUZIONI A RICHIESTA

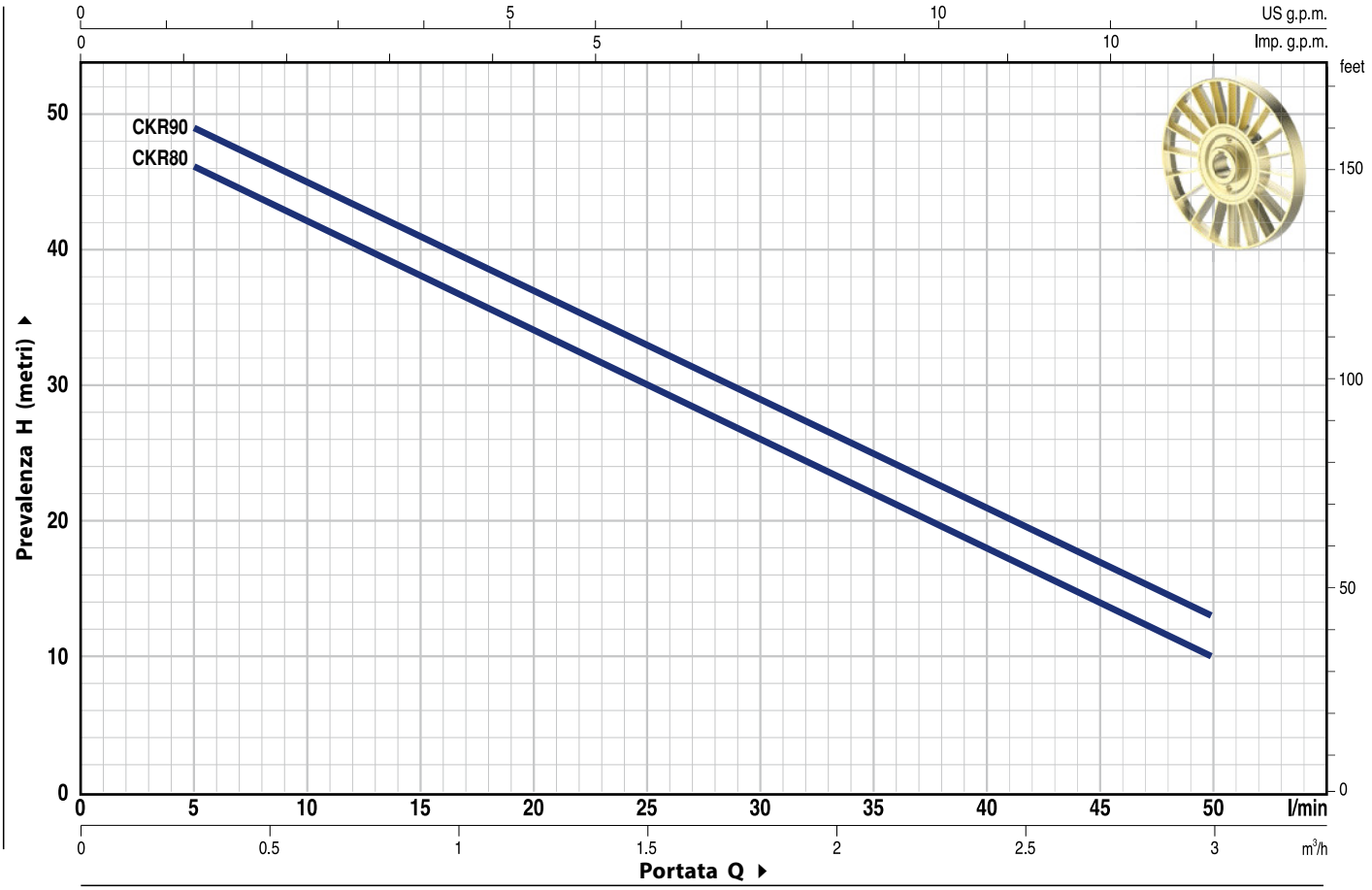
- Tenuta meccanica speciale
- Altre tensioni
- Protezione IP X5

GARANZIA

2 anni secondo le nostre condizioni generali di vendita

CURVE E DATI DI PRESTAZIONE

50 Hz **n= 2900 min^{-1}** HS= 0 m



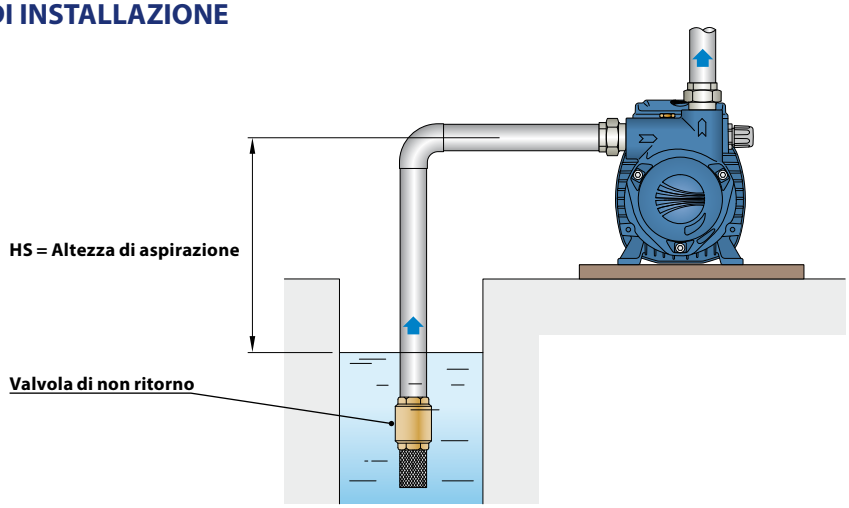
TIPO		POTENZA (P2)			Q	m³/h	0	0.3	0.6	0.9	1.2	1.5	1.8	2.1	2.4	3.0
Monofase	**Trifase**	**kW**	**HP**	▲		l/min	**0**	**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**50**
CKRm 80	**CKR 80**	0.55	0.75	**IE3**	**H**	metri	48	46	42	38	34	30	26	22	18	10
CKRm 90	**CKR 90**	0.75	1				51	49	45	41	37	33	29	25	21	13

Q = Portata **H** = Prevalenza manometrica totale **HS** = Altezza di aspirazione

Tolleranza delle curve di prestazione secondo EN ISO 9906 Grado 3B.

▲ Classe di rendimento del motore trifase (IEC 60034-30-1)

ESEMPIO DI INSTALLAZIONE



POS. COMPONENTE — CARATTERISTICHE COSTRUTTIVE

1 CORPO POMPA

Ghisa, con superficie di rasamento frontale in acciaio inox per prevenire il bloccaggio della girante dovuto ad ossidazione. Il corpo pompa è provvisto di bocche filettate ISO 228/1

2 LANTERNA

Alluminio con coperchio in ottone con funzione di rasamento frontale antibloccaggio (brevettata)

3 GIRANTE

Ottone del tipo a stella con palette radiali aperte

4 ALBERO MOTORE

Acciaio inox AISI 431

5 TENUTA MECCANICA

Tenuta	***Albero***	*Materiali*		
Tipo	***Diametro***	*Anello fisso*	*Anello rotante*	*Elastomero*
AR-12V	**Ø 12** mm	Ceramica	Grafite	Viton

6 CUSCINETTI

6203 ZZ / 6203 ZZ

7 CONDENSATORE

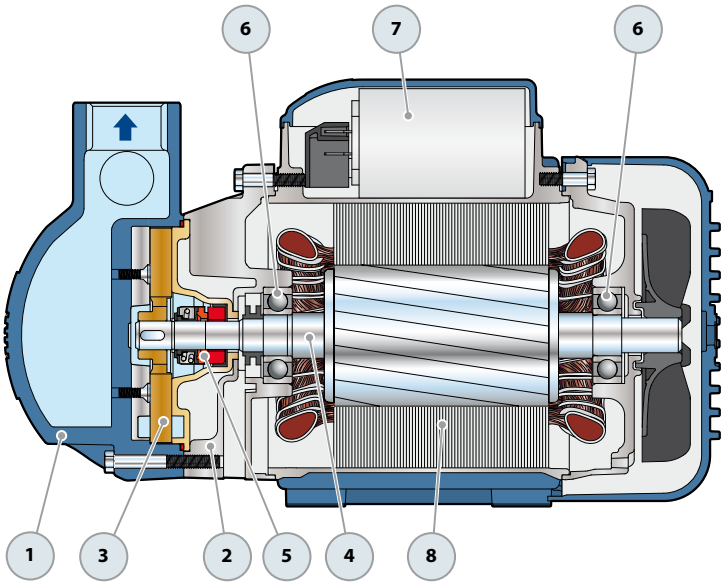
Elettropompa	***Capacità***
Monofase	***(230 V o 240 V)***
CKRm 80	**16** µF - 450 VL
CKRm 90	**20** µF - 450 VL

8 MOTORE ELETTRICO

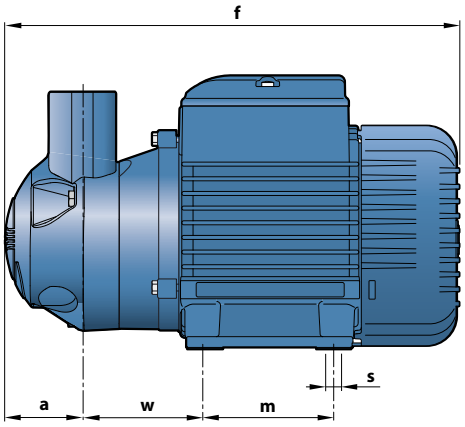
CKRm: monofase 230 V - 50 Hz con salvamotore termico incorporato nell'avvolgimento.
CKR: trifase 230/400 V - 50 Hz.

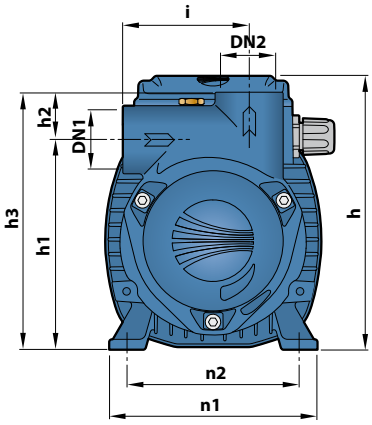
➠ **Le elettropompe trifase sono equipaggiate con motori ad alto rendimento in classe IE3 (IEC 60034-30-1)**

– Isolamento: classe F
– Protezione: IP X4



DIMENSIONI E PESI





TIPO		BOCCHE		DIMENSIONI mm												kg	
Monofase	**Trifase**	**DN1**	**DN2**	a	f	h	h1	h2	h3	i	m	n1	n2	w	s	1~	3~
CKRm 80	**CKR 80**	**1"**	**1"**	50	296	180	136	31	167	81	90	140	112	77	7	**10.9**	**10.9**
CKRm 90	**CKR 90**															**10.8**	**10.8**

ASSORBIMENTI

TIPO	TENSIONE	
Monofase	230 V	240 V
CKRm 80	**5.0** A	**4.8** A
CKRm 90	**5.1** A	**4.9** A

TIPO	TENSIONE					
Trifase	230 V	400 V	690 V	240 V	415 V	720 V
CKR 80	**3.5** A	**2.0** A	**1.2** A	**3.3** A	**1.9** A	**1.1** A
CKR 90	**3.6** A	**2.1** A	**1.2** A	**3.5** A	**2.0** A	**1.2** A

Proprietà

DATA 4 ITALY

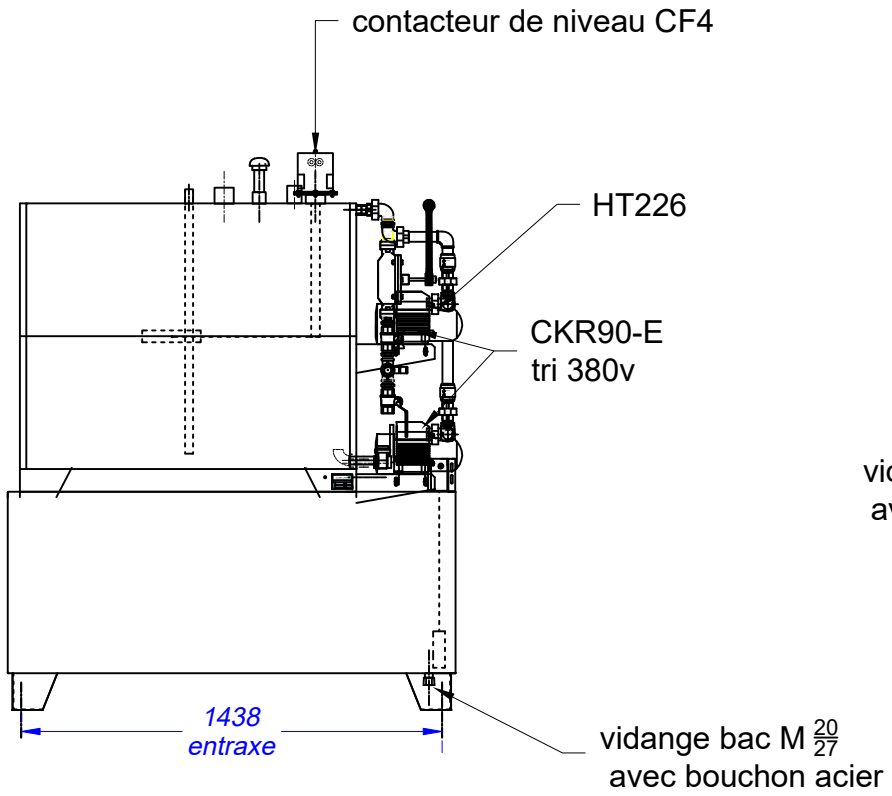
Progetto

DC 10
MILAN

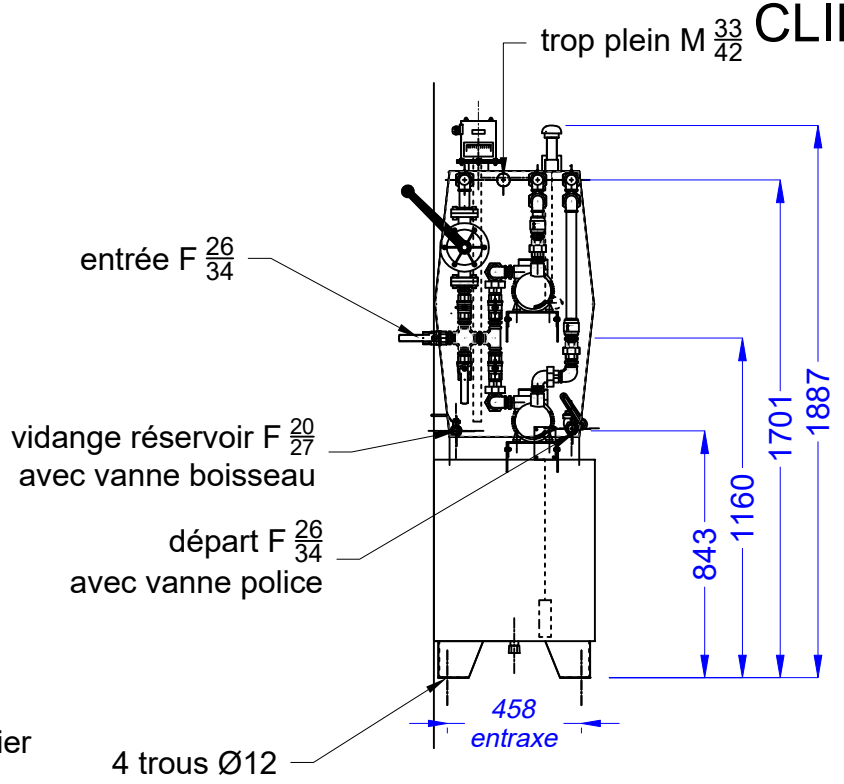
Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

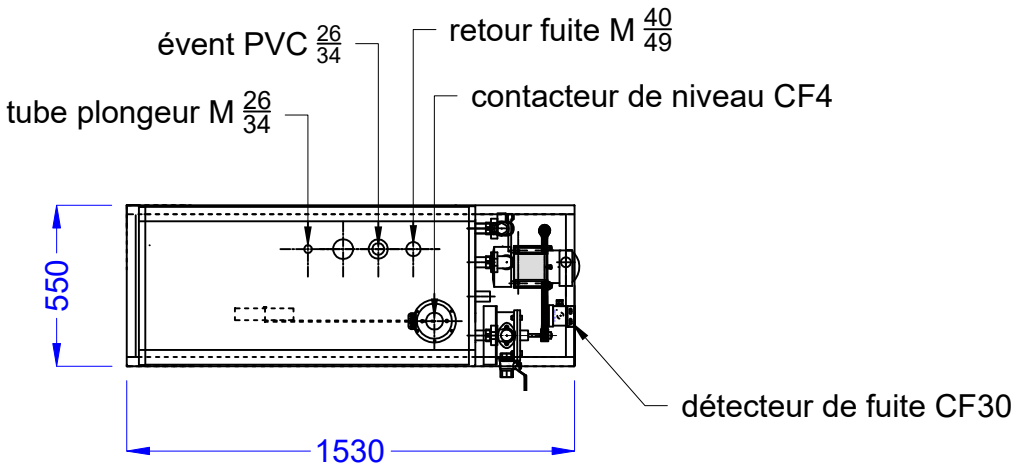
Cod	Data	Descrizione
	08/04/2021	EXE

DATA 4 ITALY - DC10
Fiche technique réservoir journalier / day tank Datasheet
Scheda Serbatoi giornalieri



CLIENT





poids: 175kg

peinture jaune caterpillar

nature des modifications	ind	Date

ROTATRON INDUSTRIE
Z.I ARROU
28290 COMMUNE NOUVELLE D'ARROU
Tél: 02 37 97 06 11
e-mail: rotatron-industrie@sfr.fr
www.rotatron-industrie.com
tôlerie fabrication française, accessoires français et UE

RAISON SOCIALE	ENERIA
réf.devis/ n°:	2021/01/061
réf.OF n° :	2103056 à 2103059
PROJET:	DC10
TITRE:	50BAL2 SP1 dépD
N° PLAN:	D-21061-2.00

description: Capacité: 500 Litres
contacteur de niveau CF4 (5 seuils)
détecteur de fuite CF30
ppe tri 380v CKR90-E
ppe man.1" HT226

Ech:

Dessinateur	Date
S. Molles	27/05/ 2021

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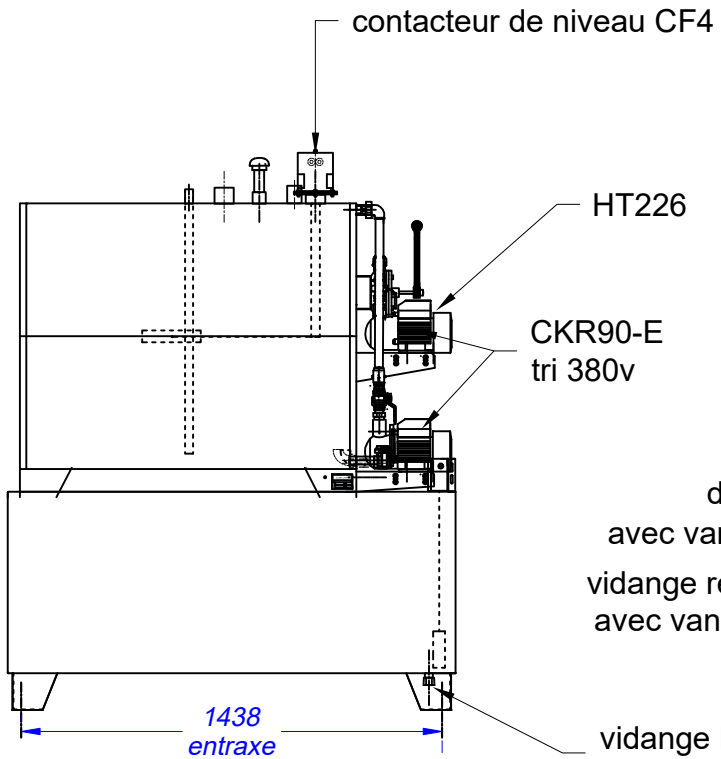
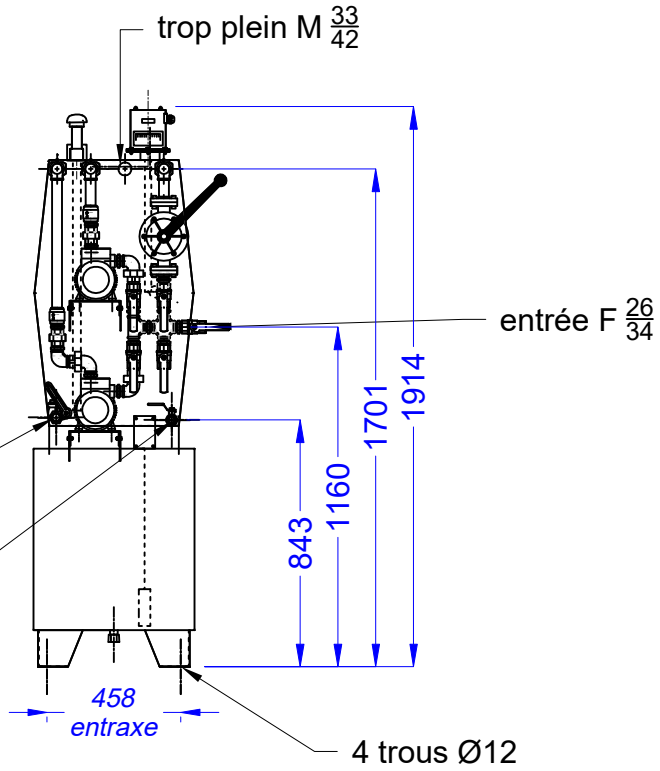
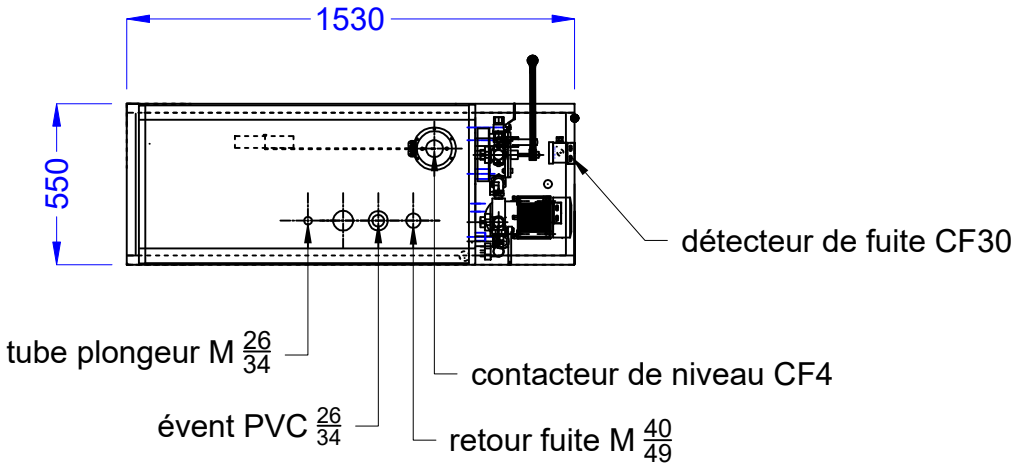
CLIENT







poids: 175kg

peinture jaune caterpillar

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tôlerie fabrication française, accessoires français et UE

RAISON SOCIALE: ENERIA

réf.devis/ n°: 2021/01/061

réf.OF n° : 2103056 à 2103059

PROJET: *DC10*

TITRE: 50BAL2 SP1 *dépG*

N° PLAN: *D-21061-1.00*

description: *Capacité: 500 Litres*
contacteur de niveau CF4 (5 seuils)
détecteur de fuite CF30
ppe tri 380v CKR90-E
ppe man.1" HT226

Ech:

Dessinateur	Date
S. Molles	28/01/2021

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Contacteur et indicateur de niveau
SÉRIE CF3/CF4

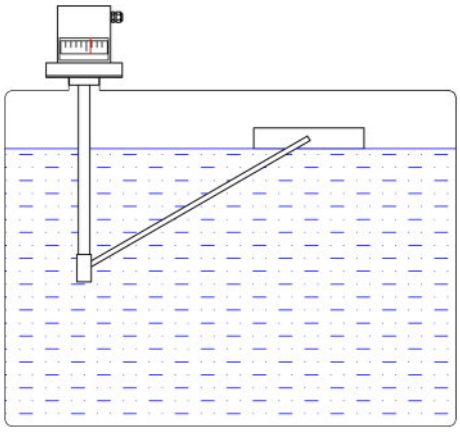
- **De 250 à 3000 mm de hauteur**
- **Transmission par renvoi d'angle**
- **Montage sur manchon 2"**
- **Tête IP54**
- **3 fonctions possibles :**
  - **Visualisation sur cadran**
  - **De 1 à 3 contacts secs**
  - **1 sortie continue (Ω)**

APPLICATIONS

Pour le jaugeage, remplissage et visualisation du niveau dans des cuves ou réservoirs :

- Réservoirs ou nourrice de carburant (fuel)
- Stockage d'huile
- Eau glycolée
- Eau de pluie

Particulièrement adapté pour répondre aux besoins et conditions d'emploi des capacités d'alimentation en fuel de groupes électrogènes.



DESCRIPTION

Sous la poussée du fluide, le flotteur entraine une tige solidaire d'un renvoi d'angle 90°.
Ce mouvement peut agir sur une aiguille associée à un cadran gradué, des contacts, et/ou un potentiomètre qui délivrera une valeur ohmique image de la mesure.
La jauge se positionne sur le haut de la cuve.

L'appareil est disponible en plusieurs versions selon les fonctions requises :
- 1 sortie continue (Ω)
- Visualisation sur cadran
  Pour faciliter la lecture, le niveau est visible sur 2 faces opposés.
- 1 à 3 contacts secs
  Sur demande, possibilité d'avoir 5 contacts

Matériel livré, réglé et étalonné, prêt à poser.

CARACTÉRISTIQUES TECHNIQUES

Matériaux	Acier, Nylon Flotteur : PVC expansé
Joint Bride	en liège
Montage	Raccord 2" GAZ Mâle
Tête de Jauge	IP54
Pression	Atmosphérique
Température	De 0 à 40 °C
Longueurs	Modèle 1 : de 250 à 1100 mm Modèle 2 : de 1100 à 3000 mm
Graduation	Litres
Contact(s)	Réglage par défaut : - Fonction remplissage : Marche à 50% et Arrêt à 80% (contact simple, 10 A, 230 V, libre de potentiel) - Alarme niveau haut : 90% (contact inverseur, 10 A, 230 V, libre de potentiel) - Alarme niveau bas : 30% (contact inverseur, 10 A, 230 V, libre de potentiel) *Autres réglages possibles de 10 à 90 % sur demande.*
Sortie ohmique	De 0 à 90 Ω (indicatif, ±15 %)

579

BAMO MESURES
22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL
Tél. **+33 (0)1 30 25 83 20** **Site** **www.bamo.fr**
Fax +33 (0)1 34 10 16 05 Mél. info@bamo.fr

CODES ET RÉFÉRENCES

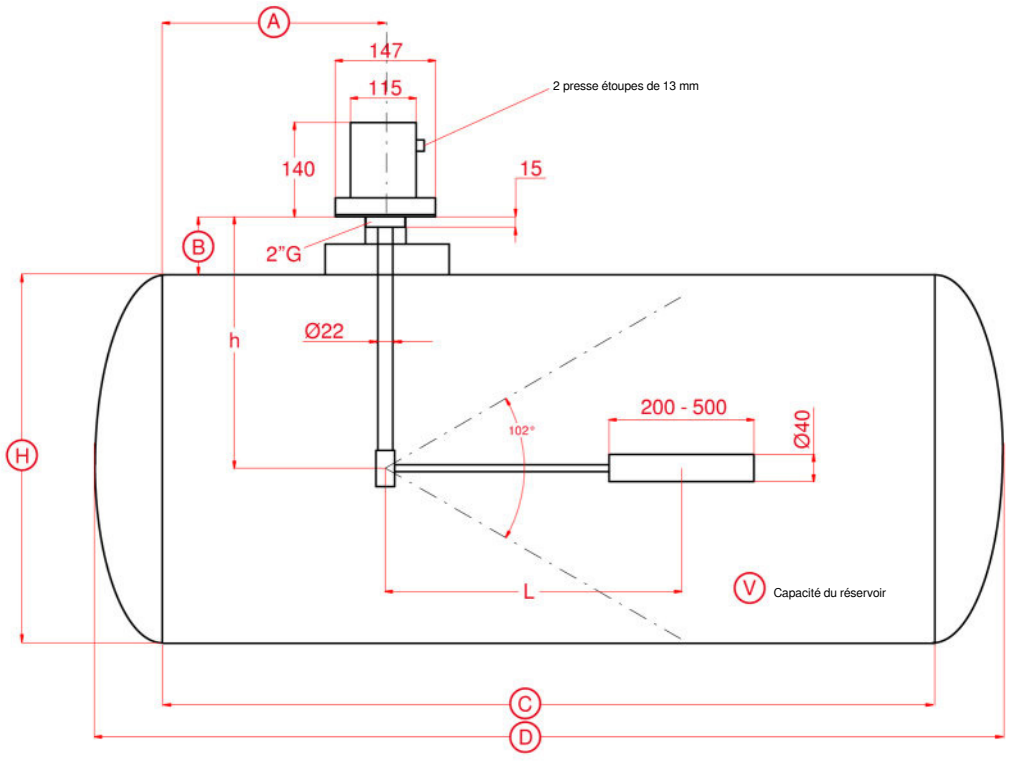
				Contacts		
Code	**Référence**	**Lecture directe**	**Sortie Ω**	**Niveau BAS**	**Niveau HAUT**	**Marche/Arrêt**
Modèle 1 : Longueur de 250 à 1100 mm						
579 050	CF3	●	●			
579 054	CF3-1S	●	●	●		
579 058	CF3-2S	●	●	●	●	
579 070	CF4 RD SIA	●	●	●	●	●
579 200	CF4	●		●	●	●
579 220	CF20			●	●	●
579 300	JLD20	●				
579 636	CF102			●		
579 641	CF103			●	●	
Modèle 2 : Longueur de 1100 à 3000 mm						
579 052	CF3 G	●	●			
579 056	CF3 G-1S	●	●	●		
579 060	CF3 G-2S	●	●	●	●	
579 072	CF4 RD SIA G	●	●	●	●	●
579 210	CF4 G	●		●	●	●
579 225	CF20 G			●	●	●
579 304	JLD20 G	●				
579 637	CF102 G			●		
579 642	CF103 G			●	●	

579

579

DIMENSIONS

Schéma d'encombrement (non à l'échelle)



Les cotes A, B, C, D, H et la capacité du réservoir (V) sont à fournir par le client.
Si le réservoir a une forme rectangulaire, le client doit également préciser sa largeur.

BAMO MESURES
22, Rue de la Voie des Bans · Z.I. de la gare · 95100 ARGENTEUIL
Tél. **+33 (0)1 30 25 83 20** **Site** **www.bamo.fr**
Fax +33 (0)1 34 10 16 05 Mél. info@bamo.fr

Level controllers and indicators
CF3/ CF4 Series

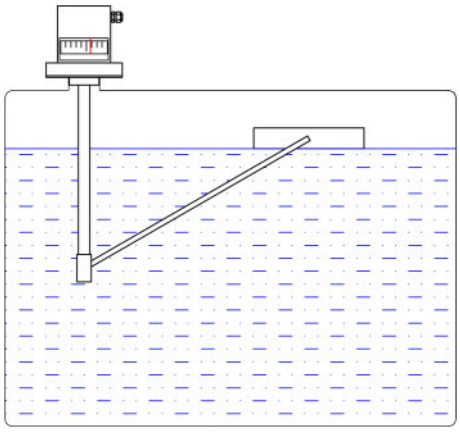
- **Tank height from 250 to 3000 mm**
- **Transmission: angle drive**
- **Fitting: male 2” BSP**
- **Head housing: IP 54**
- **3 possible functions:**
  - **Direct reading**
  - **With 1 to 3 contacts, potential free**
  - **Output signal: continuous resistive signal (Ω)**

APPLICATIONS

Gauge for level display and filling control.

- Diesel in storage tank or day-tank
- Stored lubricating oil, glycol water, rainwater

Particularly suited to meet the needs and conditions of use for storage tank or day-tank of diesel generators.



DESCRIPTION

The electric gauge is mounted above the tank.
Against the liquid height, the float transmits the level through an angle drive to a vertical stem. The stem actuates on a pointer associated with a graduated dial to display the level in the tank. Depending on the model, it can also act on contacts, and/ or a potentiometer which will deliver an ohmic value image of measurement.

The instrument is available with several functions:
- 1 continuous signal output (Ω)
- Display for direct reading of level
  For commodity, the level is visible on 2 opposite sides.
- 1 to 3 contacts (potential free)
  Option: on request up to 5 contacts

The complete system is supplied ready to install and to use.

TECHNICAL FEATURES

Materials	Steel, Nylon Float: Foamed PVC
Flange seal	Cork gasket
Fitting	2” BSP, male
Head housing	IP 54
Operating pressure	Atmospheric
Operating temperature	Between 0 and 40 °C
Measuring distances	Model 1: From 250 up to 1100 mm Model 2: From 1100 up to 3000 mm
Scale:	Liters
Contact(s)	Default setting: Filling function: ON at 50 % and OFF at 80 % capacity (2-way contact, 10 A, 230 V, potential free) - High level: 90 % capacity (Change-over contact, 10 A, 230 V, potential free) - Low level alarm: 30 % capacity (Change-over contact, 10 A, 230 V, potential free) *On request: Factory adjustment between 10 and 90 %.*
Output, resistive signal	From 0 to 90 Ω (approx., ±15 %)

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Fax +33 (0)1 34 10 16 05 E-mail export@bamo.fr

CODE NUMBERS AND REFERENCES

				Contacts		
Code	**Reference**	**Direct reading**	**Output Ω**	**LOW Level**	**HIGH Level**	**ON/ OFF**
Model 1: distance from 250 up to 1100 mm						
579 050	CF3	●	●			
579 054	CF3-1S	●	●	●		
579 058	CF3-2S	●	●	●	●	
579 070	CF4 RD SIA	●	●	●	●	●
579 200	CF4	●		●	●	●
579 220	CF20			●	●	●
579 300	JLD20	●				
579 636	CF102			●		
579 641	CF103			●	●	
Model 2: Distance from 1100 up to 3000 mm						
579 052	CF3 G	●	●			
579 056	CF3 G-1S	●	●	●		
579 060	CF3 G-2S	●	●	●	●	
579 072	CF4 RD SIA G	●	●	●	●	●
579 210	CF4 G	●		●	●	●
579 225	CF20 G			●	●	●
579 304	JLD20 G	●				
579 637	CF102 G			●		
579 642	CF103 G			●	●	

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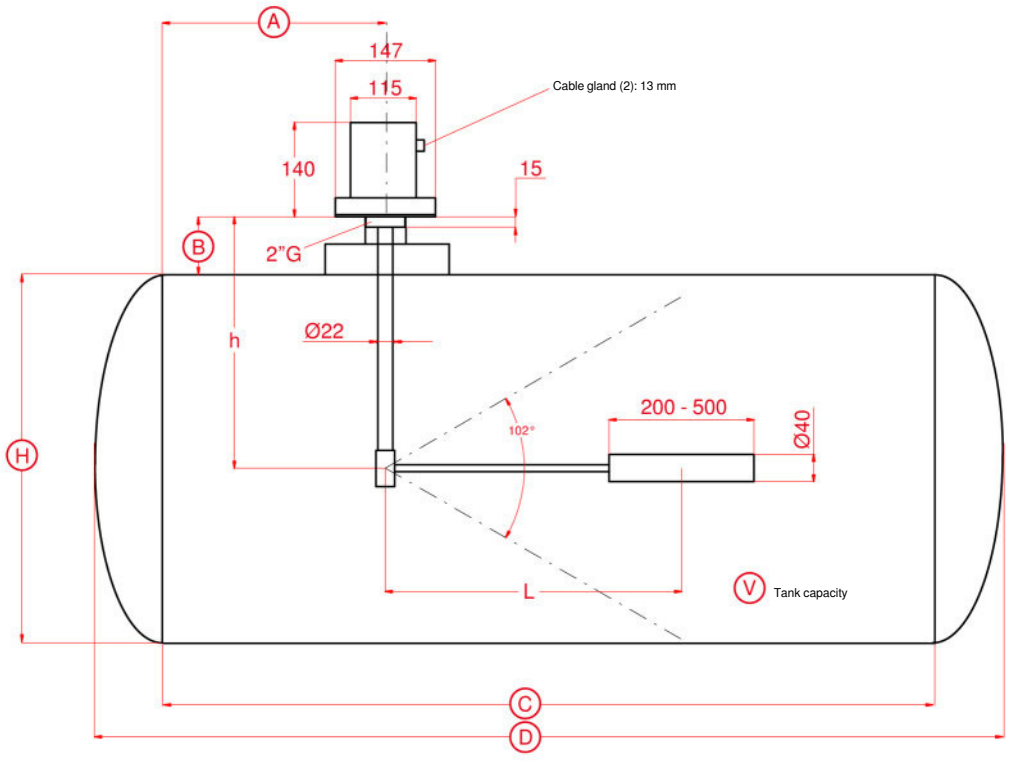
DIMENSIONS

Dimensional (not to scale)



Dimensions A, B, C, D, H and V (tank volume) must be confirmed on purchase order.
In case of a rectangular shaped tank, the width must be mentioned as well.

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CONTATTORE DI LIVELLO
CF 4

- Da 250 a 3000 mm di altezza
- Trasmissione del cambio
- Montaggio su manicotto da 2 "
- Testa IP54
- 3 possibili funzioni:
  - Visualizzazione quadrante
  - Da 1 a 3 contatti puliti
  - 1 uscita continua (Ω)

APPLICAZIONI

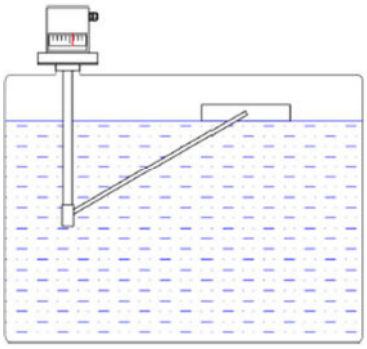
Per la misurazione, il riempimento e la visualizzazione del livello in serbatoiEsempio di liquidi:

- Carburante
- Olio
- Acqua glicoli
- Acqua piovana

Particolarmente adatto a soddisfare le esigenze e le condizioni di impiego di Capacità di fornitura di combustibile dei generatori

DESCRIZIONE

Sotto la spinta del fluido, il galleggiante fa aderire una barra a un ingranaggio d'angolo 90 °.
Questo movimento può agire su un ago associato a un quadrante graduato, contatti e / o un potenziometro che fornirà un'immagine di valore ohmico del misurare.
L'indicatore è posizionato sulla parte superiore del serbatoio.



Il dispositivo è disponibile in diverse versioni a seconda delle funzioni richieste:
- 1 uscita continua (Ω)
- Visualizzazione quadrante
  Per una facile lettura, il livello è visibile su 2 lati opposti.
- da 1 a 3 contatti puliti
  Su richiesta, possibilità di avere 5 contatti

Attrezzatura consegnata, regolata e calibrata, pronta per l'installazione

CARATTERISTICHE TECNICHE

Materiali	Acciaio, Nylon Galleggiante: PVC espanso
Flangia	sughero
Montaggio	Connessione 2 "GAS maschio
Calibro	IP54
Pressione	atmosferica
Temperatura	da 0 a 40 ° C
Lunghezze	Modello 1: da 250 a 1100 mm Modello 2: da 1100 a 3000 mm
Graduazione	Litri
Contatto	Regolazione in fabbrica: - Funzione di riempimento: attiva al 50% e ferma all'80% (contatto singolo, 10 A, 230 V, senza potenziale) - Allarme di alto livello: 90% (contatto di scambio, 10 A, 230 V, senza potenziale) - Allarme di basso livello: 30% (contatto di scambio, 10 A, 230 V, senza potenziale) Altre impostazioni possibili dal 10 al 90% su richiesta.
Uscita ohmica	Da 0 a 90 Ω (indicativo, ± 15%)

Contacteur pour bac de rétention
SÉRIE CF30

CF30

CF31

- **Pour bac de rétention et caniveau**
- **Longueur tige : de 150 à 2000 mm**
- **Implantation facile**
- **Sortie contact sec**
- **Tête de jauge IP54**

APPLICATIONS

Le contacteur à flotteur type CF30 et ses variantes ont été spécialement conçus pour la détection des fuites éventuelles du réservoir tombant dans le bac de rétention.

Liquides compatibles :
- Fuel
- Huile
- Eau de pluie
- Eau glycolée

Par sa simplicité, ce contacteur peut trouver de nombreuses autres applications.

DESCRIPTION

Sous la poussée du fluide, le flotteur entraine la tige qui actionne un contact inverseur fixé dans boîtier.

Le système de fixation permet une implantation facile sur tous les types de nourrice ou bac de rétention.
La longueur de la tige peut être modifiée sur demande.

Plusieurs versions sont disponibles selon les hauteurs de détection et les implantations :

Modèle CF30 :
Le flotteur est monté verticalement pour un faible encombrement.
Longueur de tige minimale : 150 mm
Longueur de tige maximale : 950 mm
Détection à partir de 10 cm de liquide (en fonction de la longueur de la tige).

Modèle CF30 double :
Cet appareil contient deux contacts avec deux flotteurs montés verticalement pour minimiser l'encombrement.
Un niveau détecte une alarme défaut bac de rétention (fuite) et le second permet de couper une ou plusieurs pompes/électrovannes.

Modèle CF31 :
Le flotteur est monté horizontalement pour une détection basse.
Longueur de tige minimale : 150 mm
Longueur de tige maximale : 2000 mm
Détection à partir de 20mm de liquide (en fonction de la longueur de la tige).

Modèle CF32 :
Similaire au modèle CF30 avec un raccord mâle 2''

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CARACTÉRISTIQUES TECHNIQUES

Matériaux	Tige Inox Flotteur : PVC expansé
Tête de jauge	IP54
Pression	Atmosphérique
Température	De 0 à 40 °C
Contact(s)	1 ou 2 contacts inverseur, 4 A, 230 V, libre de potentiel *Réglage en usine*

CODES ET RÉFÉRENCES

Code	Référence	Désignation	Longueur (H et H_1)
579 601	CF30-400	Contacteur à flotteur vertical 400 mm	400 mm
579 611	CF31-165	Contacteur à flotteur horizontal 165 mm	165 mm
579 600	CF30-xxx	Contacteur à flotteur vertical (longueur à préciser)	150 à 950 mm
579 605	CF30 DOUBLE-xxx-xxx	Double Contacteurs à flotteur vertical (longueurs à préciser)	230 à 950 mm
579 610	CF31-xxx	Contacteur à flotteur horizontal (longueur à préciser)	150 à 2000 mm
579 615	CF32-xxx	Contacteur à flotteur vertical, raccord 2'' (longueur à préciser)	150 à 950 mm

DIMENSIONS

Schéma d'encombrement (non à l'échelle)
Le diamètre et la longueur du flotteur varient suivant la hauteur de la tige (H et H_1).

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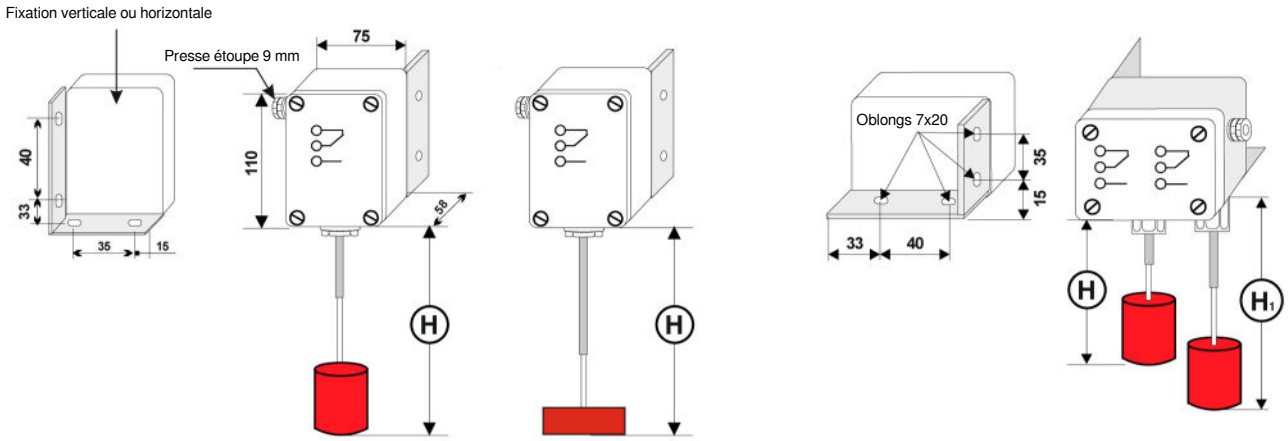
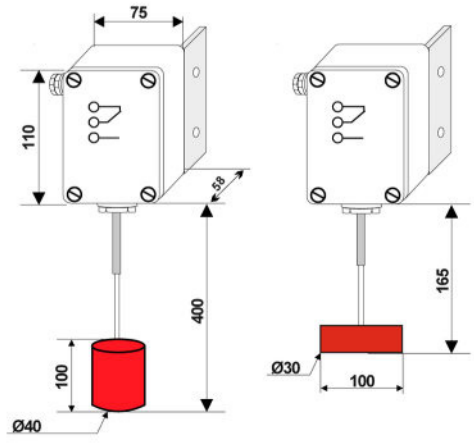


CF30 CF31 CF30 DOUBLE



CF30-400 CF31-165

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Float switch for retention receiver
CF30 Series

CF-30

CF-31

- **For retention receiver and gutter**
- **Stem length: from 150 to 2000 mm**
- **Easy installation**
- **Output: contact, potential free**
- **Head housing: IP 54**

APPLICATIONS

The float switch CF30 and its variants, are designed to detect a leak from the main tank falling into the retention receiver.

Compatibility with liquids (examples):
- Diesel
- Lubricating oil
- Rainwater
- Water-glycol mixture

As it is a simple controller, much more applications are available.

DESCRIPTION

Against the liquid height, the float lift up a stem actuating a change-over contact.

The fitting allows installation on almost any day-tank or retention receiver.
The stem length may be modified on request.

Several versions are available depending on detection heights and mounting:

CF30 Model:
The float is mounted vertically to reduce dimensions.
Distance H: Min. 150 mm
Distance H: Max. 950 mm
Detection from 100 mm of liquid as a minimum (depending of H).

CF31 Model:
The float is mounted horizontally for a detection as soon as possible.
Distance H: Min. 150 mm
Distance H: Max. 2000 mm
Detection from 20 mm of liquid as a minimum (depending of H).

CF32 Model:
Similar to CF30, but with BSP 2" fitting

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Non-contractual document: Subject to amendments due to improvements

TECHNICAL FEATURES

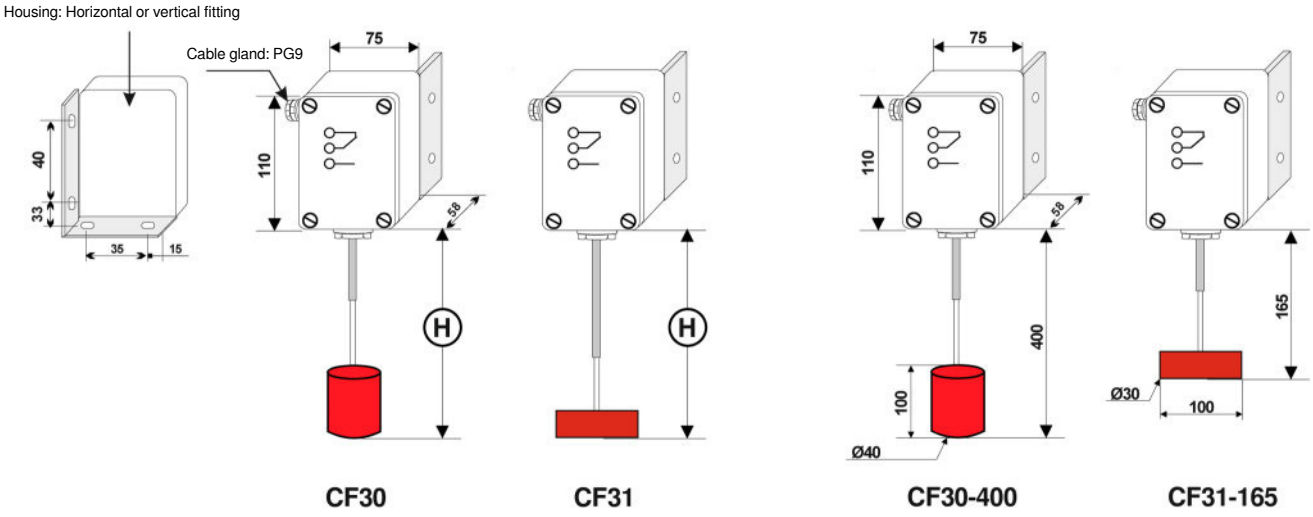
Materials	Stem: Stainless steel Float: Foamed PVC
Head housing	IP 54
Operating pressure	Atmospheric
Operating temperature	Between 0 and 40 °C
Contact(s)	1 changeover contact, 4 A, 230 V, potential-free *Factory setting*

CODE NUMBERS AND REFERENCES

Code	Reference	Description	Distance H
579 601	CF30-400	Float switch, vertical float, 400 mm	400 mm
579 611	CF31-165	Float switch, horizontal float, 165 mm	165 mm
579 600	CF30-xxx	Float switch, vertical float, length H on request	150 up to 950 mm
579 610	CF31-xxx	Float switch, horizontal float, length H on request	150 up to 2000 mm
579 615	CF32-xxx	Float switch, vertical float, fitting BSP 2 '', length H on request	150 up to 950 mm

DIMENSIONS

Dimensional (not to scale)
The diameter and the length of the float vary according to the distance H.



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Non-contractual document: Subject to amendments due to improvements

CONTATTORE PER VASCA DI RITENZIONE
CF 30

CF30

- Vasca di ritenzione e canali di captazione
- Lunghezza dello stelo: da 150 a 2000 mm
- Facile implementazione
- Uscita a contatto secco
- Testa di calibro IP54

APPLICAZIONI

Il contattore a galleggiante tipo CF30 e le sue varianti sono stati progettati appositamente per il rilevamento di eventuali perdite dal serbatoio che cade nel vasca di ritenzione.

Liquidi compatibili:
- Carburante
- Olio
- Acqua piovana
- Acqua glicoli

Per la sua semplicità, questo interruttore può trovare molte altre applicazioni.

DESCRIZIONE

Sotto la pressione del fluido, il galleggiante aziona l'asta che aziona un contatto inverter fissato nell'alloggiamento.

Il sistema di fissazione consente un facile impianto su tutti i tipi di serbatoio o di vacsa di ritenzione.
La lunghezza dell'asta può essere modificata su richiesta.

Sono disponibili diverse versioni a seconda dell'altezza di rilevamento e del posizioni:

Modello CF30:
Il galleggiante è montato verticalmente per un ingombro ridotto.
Lunghezza minima dell'albero: 150 mm
Lunghezza massima dello stelo: 950 mm
Rilevazione da 10 cm di liquido (a seconda della lunghezza del gambo).

CARATTERISTICHE TECNICHE

Materiali	aste in acciaio inossidabile Galleggiante in PVC espanso
Calibro	IP54
Pressione	atmosferica
Temperatura	da 0 a 40 ° C
Contatto (i)	1 o 2 contatti di scambio, 4 A, 230 V, senza potenziale Regolazione in fabbrica

Proprietà

DATA 4 ITALY

Progetto

DC 10
MILAN

Supervisore delegato del committente

GIS.IMO S.r.l.
centro direzionale quattrotorri
06132 PERUGIA
Tél. : +39 075 517 29 83
Fax : +39 075 518 12 88

Assistente del committente

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Tél. : +39 02 430 6931
Fax : +39 02 480 170 51

Progetto architettonico

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www.garrettiassociati.it
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Fax : +39 02 480 170 51

Opere edili e prefabbricati

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Fax : +39 075 518 12 88

Impianti meccanici

OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.
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www.engie-axima.fr
Tél. : +39 02 8180951
Fax : +39 02 8135163

impianti elettrici/dati

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Fax : +39 02 94399655

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www.schneider-electric.com
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Fax : +39 0354153200

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Rue de Longpont - BP 10202 - 91311 MONTLHERY
Cedex - FRANCE
www.eneria.fr
Tél. : +33 (0) 169802100
Fax : +33 (0) 169802150

Progettazione antincendio

STUDIO TECNICO ZACCARELLI S.r.l.
via Ludovico il Moro, 17 - 20143 MILANO
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Tél. : +39 02 891 200 81
Fax : +39 02 813 962 8

Supervisione

ITALSOCOTEC S.p.a.
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italsocotec@italsocotec.it
Tél. : +39 02 89051500
Fax : +39 02 89051501

Cod	Data	Descrizione
	15/10/2021	DOE

DATA 4 ITALY - DC10
Fiche technique vanne fioul / Fuel valve Datasheet
Scheda Valvole Circuito gasolio

Serie KOSMOS

PN 80 ECOLOGIC

CARATTERISTICHE TECNICHE:

Limiti di temperatura: per fluidi da -20°C a +130°C
Limiti di pressione: per fluidi da 80 bar a 40 bar

CARATTERISTICHE SPECIFICHE:

Passaggio: totale.
Stelo: con sistema di sicurezza a premistoppa.
Guarnizioni laterali: PTFE vergine ad alta resistenza.
Tenuta superiore:
DSS4® Dynamic Sealing System (brevetto internazionale)
4 guarnizioni coniche antifrizione in PTFE a regolazione automatica a tenuta dinamica
Sistema ideale per utilizzi ad alto numero di cicli, alta e bassa pressione e vuoto.

Campi di utilizzo:
la serie KOSMOS viene raccomandata negli impianti di distribuzione acqua, riscaldamento industriale e civile, idrici in media e alta pressione, oleodinamici e pneumatici, petroliferi e petrolchimici, e per fluidi non aggressivi.

Estremità filettate:
• di serie femmina e maschio a norme UNI ISO 228/1.

Organi di manovra:
leva alluminio, farfalla alluminio.
Colori disponibili: nero.
Tutte le valvole rispettano la direttiva 97/23/CE e vengono testate al 100% con prova di tenuta pneumatica a controllo elettronico.

DIMENSIONI

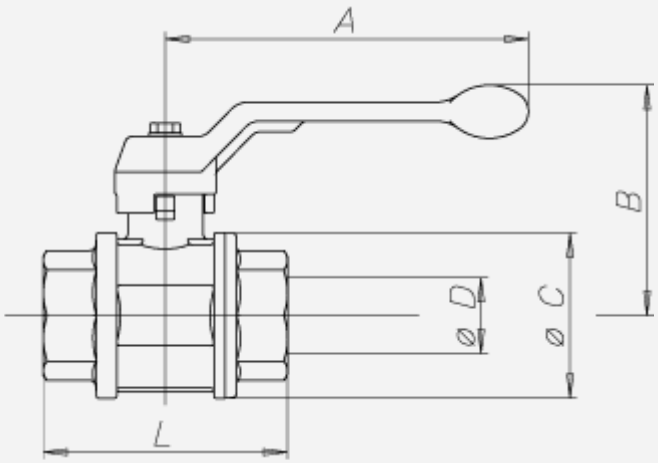
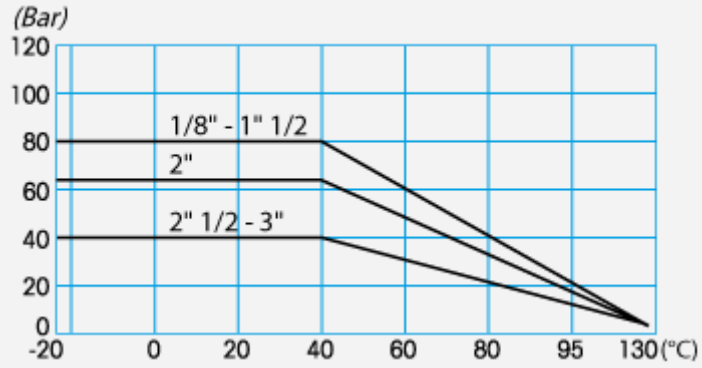


Tabella generale:
dimensioni della valvola per tipo e misura

diametro nominale mm	6	8	10	15	20	25	32	40	50	65	80
misura gas in pollici	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"	2"1/2	3"
Ø D passaggio mm	8	8	10	15	20	25	32	40	50	65	80
A mm	75	75	75	100	100	120	150	150	175	280	280
B mm	52	52	54	64	68	79	98	104	116	155	167
Ø C mm	23	23	28	35	43	52	64	78	95	119	144
F/F - L mm	50	41	46	55	65	76	86	103	120	146	172
M/F - L mm	52	47	56	66	76	87	97	115	134	159	-
B FARFALLA mm	-	43	45	54	58	70	-	-	-	-	-
Kv	5	6	8	15	28	39	84	156	243	476	770

Diagramma pressione/temperatura



art. 0301 F/F con leva in alluminio da 1/4" a 3"

art. 0302 M/F con leva in alluminio da 1/4" a 2"

art. 0321 F/F con farfalla in alluminio da 1/4" a 1"

art. 0322 M/F con farfalla in alluminio da 1/4" a 1"

art. 0381 F/Fcon prolunga e leva da 1/2" a 3"

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THE INTERNATIONAL CERTIFICATION NETWORK

www.iqnet-certification.com

IQNet, the association of the world's first class certification bodies, is the largest provider of management System Certification in the world. IQNet is composed of more than 30 bodies and counts over 150 subsidiaries all over the globe.

ICIM

CERTIFICATO n. / *CERTIFICATE No.* **0216A/4**

SI CERTIFICA CHE IL SISTEMA DI GESTIONE AMBIENTALE DI
WE HEREBY CERTIFY THAT THE ENVIRONMENTAL MANAGEMENT SYSTEM OPERATED BY

EFFEBI S.p.A.

Sede e Unità Operativa
Via Verdi, 68 - 25073 Bovezzo (BS) - Italia
Progettazione e fabbricazione di valvole a sfera e raccorderia in ottone tramite lavorazioni meccaniche con asportazione di truciolo. Fabbricazione di valvole a sfera in acciaio, valvole a farfalla e attuatori mediante assemblaggio e confezionamento

Unità Operativa
Via Verdi, 27 - 25073 Bovezzo (BS) - Italia
Deposito materiali. Fabbricazione di valvole a sfera in acciaio, valvole a farfalla e attuatori mediante assemblaggio e confezionamento

È CONFORME ALLA NORMA / *IS IN COMPLIANCE WITH THE STANDARD*

UNI EN ISO 14001:2015

Sistema di Gestione Ambientale / *Environmental Management System*

PER LE SEGUENTI ATTIVITÀ / *FOR THE FOLLOWING ACTIVITIES*

EA: 18

Progettazione e fabbricazione di valvole a sfera e raccorderia in ottone tramite lavorazioni meccaniche con asportazione di truciolo. Fabbricazione di valvole a sfera in acciaio, valvole a farfalla e attuatori mediante assemblaggio e confezionamento.

Design and production of brass ball valves and fittings by machining. Production of steel ball valves, butterfly valves and actuators through assembling and packaging.

Certificazione rilasciata in conformità al Regolamento Tecnico ACCREDIA RT-09.
Certificate issued in accordance with the Technical Regulations ACCREDIA RT-09.

Il presente certificato è soggetto al rispetto del documento ICIM "Regolamento per la certificazione dei sistemi di gestione" e al relativo Schema specifico.
The use and the validity of this certificate shall satisfy the requirements of the ICIM document "Rules for the certification of company management systems" and specific Scheme.

Per informazioni puntuali e aggiornate circa eventuali variazioni intervenute nello stato della certificazione di cui al presente certificato, si prega di contattare il n° telefonico +39 02 725341 o indirizzo e-mail info@icim.it.
For timely and updated information about any changes in the certification status referred to in this certificate, please contact the number +39 02 725341 or email address info@icim.it.

Data emissione	Emissione corrente	Data di scadenza
First issue	*Current issue*	*Expiring date*
21/02/2006	21/02/2018	20/02/2021

ICIM S.p.A.
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www.icim.it

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

SGQ	N° 004 A	PRD	N° 004 B
SGA	N° 005 D	PRS	N° 082 C
SGE	N° 005 M	ISP	N° 046 E
SCR	N° 006 F	ETS	N° 003 O
SSI	N° 008 G	EMAS	N° 001 P

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

CISQ eco

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CISQ is the Italian Federation of management system Certification Bodies.

THE INTERNATIONAL CERTIFICATION NETWORK

CERTIFICATE

CISQ/ICIM SPA has issued an IQNet recognized certificate that the organization:

EFFEBI S.p.A.

Head Office and Operative Unit
Via Verdi, 68 - I-25073 Bovezzo (BS)
Operative Unit
Via Verdi, 27 - I-25073 Bovezzo (BS)

has implemented and maintains a

Environmental Management System

for the following scope:

Design and production of brass ball valves and fittings by machining. Production of steel ball valves, butterfly valves and actuators through assembling and packaging.

which fulfils the requirements of the following standard:

ISO 14001:2015

Issued on:	**2018-02-21**
First Issued on:	**2006-02-21**
Expires on:	**2021-02-20**

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document.

Registration Number: IT-44665

Alex Stoichitoiu
President of IQNET

Ing. Claudio Provetti
President of CISQ

IQNet Partners*:
AENOR *Spain* AFNOR Certification *France* APCER *Portugal* CCC *Cyprus* CISQ *Italy*
CQC *China* CQM *China* CQS *Czech Republic* Cro Cert *Croatia* DQS Holding GmbH *Germany* FCAV *Brazil*
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IRAM *Argentina* JQA *Japan* KFQ *Korea* MIRTEC *Greece* MSZT *Hungary* Nemko AS *Norway* NSAI *Ireland*
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IQNet is represented in the USA by: AFNOR Certification, CISQ, DQS Holding GmbH and NSAI Inc.

* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under www.iqnet-certification.com

0774CM_03_EN

CERTIFICATO DI APPROVAZIONE DEL SISTEMA DI QUALITA

CERTIFICATE OF QUALITY SYSTEM APPROVAL

N° CE-1370-PED-E1-EFB 001-20-ITA

Bureau Veritas Italia SpA, agendo nell'ambito della notifica (numero dell'organismo notificato 1370), attesta che il sistema di qualità applicato dal fabbricante per la produzione, per l'ispezione finale e per le prove sull'attrezzatura a pressione identificata di seguito è stato esaminato secondo le prescrizioni del modulo E1 dell'allegato III della direttiva « Attrezzature a Pressione » n. 2014/68/UE ed è conforme alle disposizioni della Direttiva.

Bureau Veritas Italia SpA, acting within the scope of its notification (notified body number 1370), attests that the quality system operated by the manufacturer for final product inspection and testing of the pressure equipment identified hereunder has been examined against the provisions of annex III, module E1, of the Pressure Equipment Directive n° 2014/68/EU, and found to satisfy the provisions of the directive which apply to it.

Fabbricante (Nome) */ Manufacturer (Name):*	EFFEBI S.p.A
Indirizzo */ Address:*	Via Giuseppe Verdi, n° 68 25073, Bovezzo, Italy
Nome - Marchio commerciale: *Trading Name - Mark*	EFFEBI SPA
Descrizione dell'attrezzatura */ Equipment description:*	PRESSURE ACCESSORY
Identificazione delle attrezzature (o elenco in allegato, se necessario): *Identification of equipment concerned (or list on the back or attached where necessary)*	BALL and BUTTERFLY VALVES (see 2nd page for more details)
Questo certificato scadrà il (gg/mm/aaaa): *This certificate will expire on (dd/mm/yyyy)*	19/01/2023

L'approvazione è subordinata agli audit di sorveglianza, visite, prove e verifiche condotte da Bureau Veritas Italia SpA che ha stipulato un contratto con il fabbricante, in base alle disposizioni di tale contratto

The approval is conditional upon the surveillance audits, visits, tests and verifications to be carried out by the local Bureau Veritas entity that entered into a contract with the manufacturer, pursuant to the provisions of such contract.

Questo certificato è presunto nullo ed il fabbricante si farà esclusivo carico delle conseguenze del suo utilizzo, qualora questi non rispettasse gli impegni assunti nel sottoscrivere il contratto con Bureau Veritas Italia SpA con particolare riferimento a: (a) applicazione del sistema di qualità approvato, (b) conformità dell'attrezzatura con la sua documentazione tecnica e (c) l'ispezione finale e le prove sull'attrezzatura e, in generale, se il fabbricante non rispettasse uno qualsiasi degli obblighi imposti a suo carico dalla direttiva N° 2014/68/UE del 15 maggio 2014 così come trasposta nelle leggi nazionali applicabili.

This certificate shall be deemed to be void and the manufacturer shall alone bear any consequences pursuant to its use, where the manufacturer fails to comply with his undertakings as per the agreement with Bureau Veritas Italia SpA in respect of (a) implementation of the approved quality system and (b) inspection and tests on the final product, and generally where the manufacturer fails in particular to comply with any of his obligations under directive nr 2014/68/EU of 15 may 2014 as transposed in the applicable law(s).

Fatto a *Made at*	Il (gg/mm/aaaa) *On (dd/mm/yyyy)*	Approvato e Registrato in *Approved and Recorded in*	Firmato da *Signed by*	Firma autorizzata dall'Organismo Notificato N 1370 *Signature Authorized by Notified Body No 1370*
Milan	20/01/2020	Italy	CARLO ALBERTO PANDOLFI	

Codice di Registrazione */ Registration Code :* 2020/000990/CE-1370-PED

Il presente documento è soggetto ai termini delle Condizioni Generali di Vendita allegate al contratto firmato dal richiedente.
The present document is subject to the terms of General Conditions of Service attached to the agreement signed by the applicant.
Il presente documento non può essere riprodotto, se non dal fabbricante nel rispetto delle disposizioni del contratto stipulatocon Bureau Veritas Italia SpA.
The present document shall not be reproduced, except by the manufacturer in compliance with the provisions of the contract entered into between the local Bureau Veritas entity and the manufacturer.

PED - E1 - Rev. 06/2016 E1

N° CE-1370-PED-E1-EFB 001-20-ITA

Esistenza di un allegato al certificato di approvazione del sistema di qualità / *Existence of an annex to the certificate of quality system approval*	N.A.
Altre informazioni (se applicabile) : *Other information (where applicable)*	see List of Equipments for more details

Elenco delle attrezzature

List of the concerned equipment

BALL VALVES

DN32 PN100 MOP5-20
DN40 PN100 MOP5-20
DN50 PN80 MOP5-20
DN65 PN40 MOP5
DN80 PN40 MOP5
DN100 PN40 MOP5
DN32 PN100 1500WOG
DN40 PN100 1500WOG
DN50 PN100 1500WOG
DN65 PN100 1500WOG
DN80 PN100 1500WOG
DN100 PN100 1500WOG

BUTTERFLY VALVES

DN40 PN16
DN50 PN16
DN465 PN16
DN80 PN16
DN100 PN16
DN125 PN16
DN150 PN16
DN200 PN16
DN250 PN10
DN300 PN10
DN350 PN10
DN400 PN10
DN450 PN10
DN500 PN10
DN550 PN10
DN600 PN10
DN700 PN10
DN750 PN10

"PN lower than those indicated are also allowed,except for those valves falling under Art.4 para.3 of Directive 2014/68/UE"

PED - E1 - Rev. 06/2016 E1

CISQ is a member of

IQNet

THE INTERNATIONAL CERTIFICATION NETWORK

www.iqnet-certification.com

IQNet, the association of the world's first class certification bodies, is the largest provider of management System Certification in the world. IQNet is composed of more than 30 bodies and counts over 150 subsidiaries all over the globe.

ICIM

CERTIFICATO N.
CERTIFICATE No. **0024/9**

SI CERTIFICA CHE IL SISTEMA DI GESTIONE PER LA QUALITÀ DI
WE HEREBY CERTIFY THAT THE QUALITY MANAGEMENT SYSTEM OPERATED BY

EFFEBI S.p.A.

Sede e Unità Operativa
Via Verdi, 68 - 25073 Bovezzo (BS) – Italia
Direzione e uffici amministrativi, progettazione, produzione.
Unità Operativa
Via Verdi, 27 - 25073 Bovezzo (BS) – Italia
Produzione e montaggio, magazzino e logistica.

È CONFORME ALLA NORMA / *IS IN COMPLIANCE WITH THE STANDARD*

UNI EN ISO 9001:2015

Sistema di Gestione per la Qualità / *Quality Management System*

PER LE SEGUENTI ATTIVITÀ / *FOR THE FOLLOWING ACTIVITIES*

EA: 18

Progettazione e fabbricazione di valvole a sfera e raccorderia in ottone tramite lavorazioni meccaniche con asportazione di truciolo. Fabbricazione di valvole a sfera in acciaio, valvole a farfalla e attuatori mediante assemblaggio e confezionamento

Design and manufacture of brass ball valves and fittings through machining with chip removal. Manufacture of steel ball valves, butterfly valves and actuators by assembly and packaging

Riferirsi alla documentazione del Sistema di Gestione per la Qualità aziendale per l'applicabilità dei requisiti della norma di riferimento.
Refer to the documentation of the Quality Management System for details of application to reference standard requirements.

Il presente certificato è soggetto al rispetto del documento ICIM "Regolamento per la certificazione dei sistemi di gestione" e al relativo Schema specifico.
The use and the validity of this certificate shall satisfy the requirements of the ICIM document "Rules for the certification of company management systems" and specific Scheme.

Per informazioni puntuali e aggiornate circa eventuali variazioni intervenute nello stato della certificazione di cui al presente certificato, si prega di contattare il n° telefonico +39 02 725341 o indirizzo e-mail info@icim.it.
For timely and updated information about any changes in the certification status referred to in this certificate, please contact the number +39 02 725341 or email address info@icim.it.

DATA EMISSIONE	EMISSIONE CORRENTE	DATA DI SCADENZA
FIRST ISSUE	*CURRENT ISSUE*	*EXPIRING DATE*
16/12/1991	20/12/2019	19/12/2022

ICIM S.p.A.
Piazza Don Enrico Mapelli, 75 – 20099 Sesto San Giovanni (MI)
www.icim.it

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO

SGQ N° 004 A

Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreements

FEDERAZIONE CISQ

www.cisq.com

CISQ è la Federazione Italiana di Organismi di Certificazione dei sistemi di gestione aziendale.
CISQ is the Italian Federation of management system Certification Bodies.

0449CM_03_IT

Proprietà

DATA 4 ITALY

Progetto

DC 10
MILAN

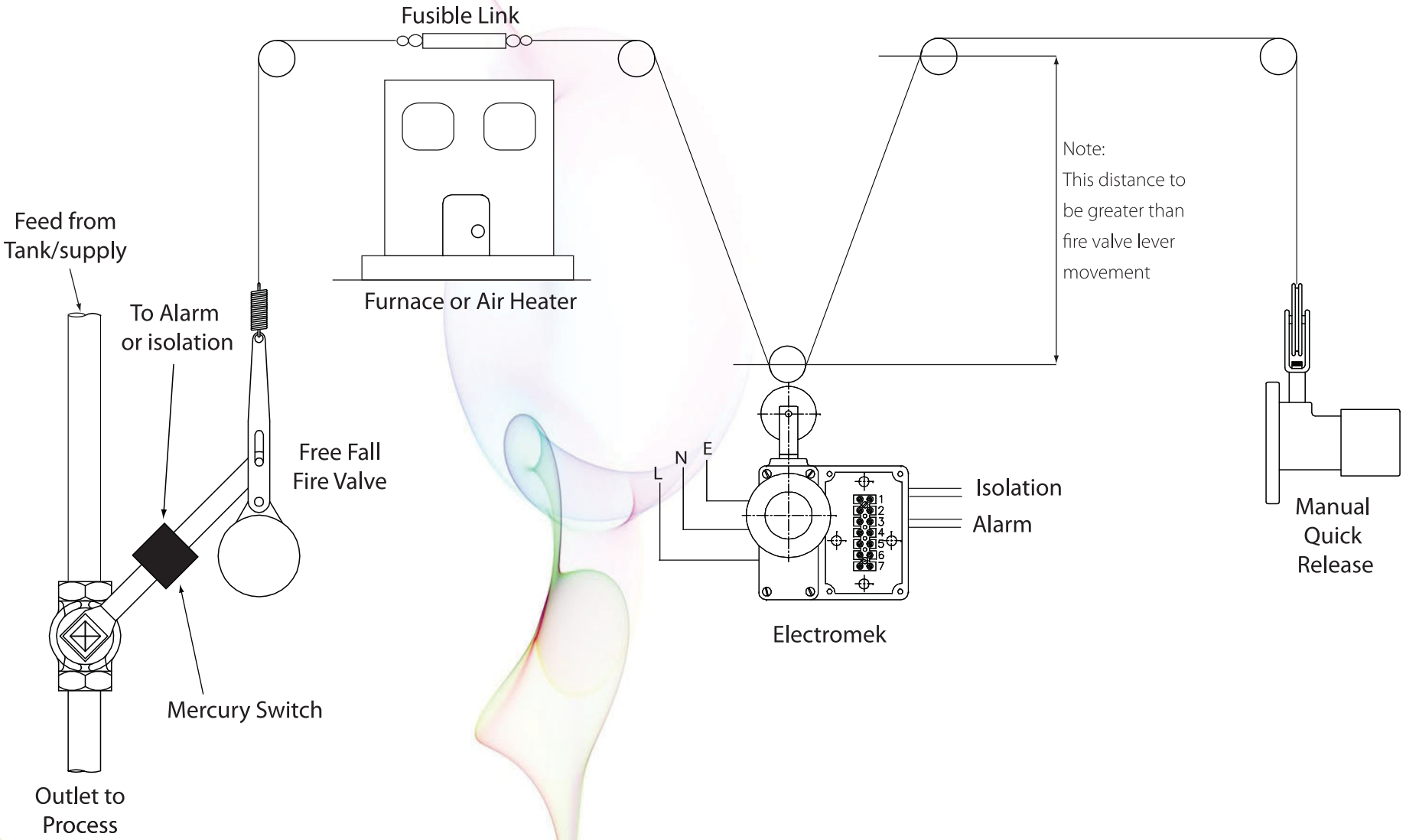
Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	15/10/2021	DOE

DATA 4 ITALY - DC10

Fiche technique vanne fusible / Fire valve Datasheet
Scheda valvola antincendio del combustibile

Manual Fire Valve Application Schematic



ITT
Engineered for life

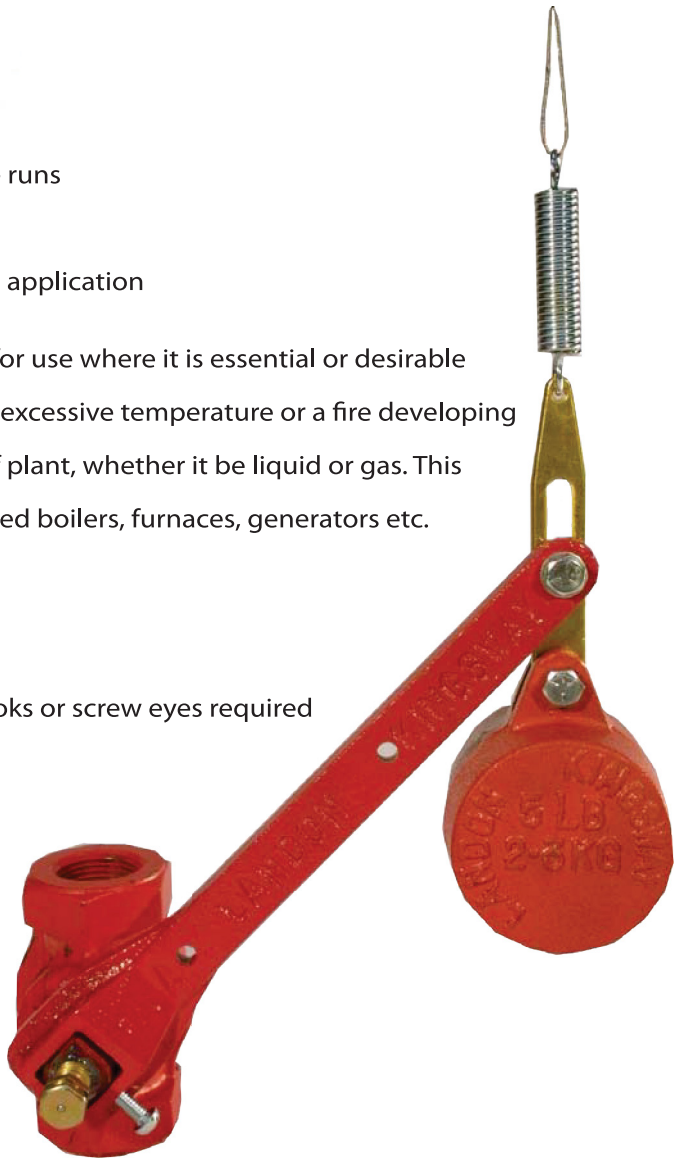
LANDON KINGSWAY
SAFETY, CONTROL & ENERGY MANAGEMENT

Free Fall Fire Valve Mk1

Advantages

- Positive rotary action
- Leak-tight
- Every item selected in the light of experience
- Can be fitted in either vertical or horizontal pipe runs
- Can be used either with fuel, oil, gas or water
- Special linkage available if required for low level application

Our free-fall valve equipment has been evolved for use where it is essential or desirable to have a safety device which will in the event of excessive temperature or a fire developing positively shut-off the supply of fuel to a piece of plant, whether it be liquid or gas. This equipment to BS 799, is necessary for oil & gas fired boilers, furnaces, generators etc. It may also be used as a dump valve.



When ordering please state:

- Any additional fusible links, pulleys, screws, hooks or screw eyes required
- Size of pipe for which required
- Whether valve to be screwed or flanged
- Additional length of cable if required

Free Fall Fire Valve

Equipment consists of:

1. A weight-operated, glandless cast iron rotary plug type screwed valve which is internally lubricated. The valve cannot leak, will not stick or jam, and is unaffected by the pressure in the system. Flanged valves are available when required. The valves are suitable for use with pressure up to 1379 x 103 N/m2 (200 lbs./sq.in.). Many valves are supplied for this purpose are of the gland type which are obviously unsuitable, as it is usually found that to prevent leakage they have to be tightened to a degree which inhibits free movement of the valve and thus destroys their usefulness.
2. A Kingsway special 'Free-fall' device. The valve is weight-operated and so arranged that the weight falls freely, doing no work during the first part of its travel. By the time the weight is called upon to move the valve it has accumulated sufficient momentum to overcome the inertia of the valve plug. Where pipe run is at low level, special linkage can be supplied to raise the lowest position of dead weight to pipe centre line.
3. 30 ft (9.1 metres) of easy to fit, non corrosive, carefully selected stranded stainless steel cable to hold the valve open. Many cables are too heavy and springy to run easily on the pulleys.
4. Three brass screw hooks with brass pulleys which automatically align themselves to suit the run of the cable. Two of these are wood screw thread, and one is ¼" BSP thread for fitting to metal surfaces. Rigid pulleys are slow to install because alignment is a matter of adjustment which is difficult to arrange.
5. One turnbuckle or wire strainer for valves size 2" BSP and above
6. Five tube cable connectors. Where the cable has to be cut and a loop formed, these connectors are quick and effective. Simply thread the twin cables through the tube and pinch tight with a pair of pliers.
7. One fusible link specially made to break when the temperature reaches a pre-determined point. Normally the link is made to operate at 71°C (160°F) as BS 799 part 5 1975, but other temperatures can be catered for if required.
8. One heavy brass wood screw threaded eye to secure the far end of the cable to the wall or ceiling
9. One engraved warning notice to hang on the cable to prevent people walking into it

NOTE Extra or replacement links always available separately at short notice

FREE FALL FIRE VALVE

Lubrication

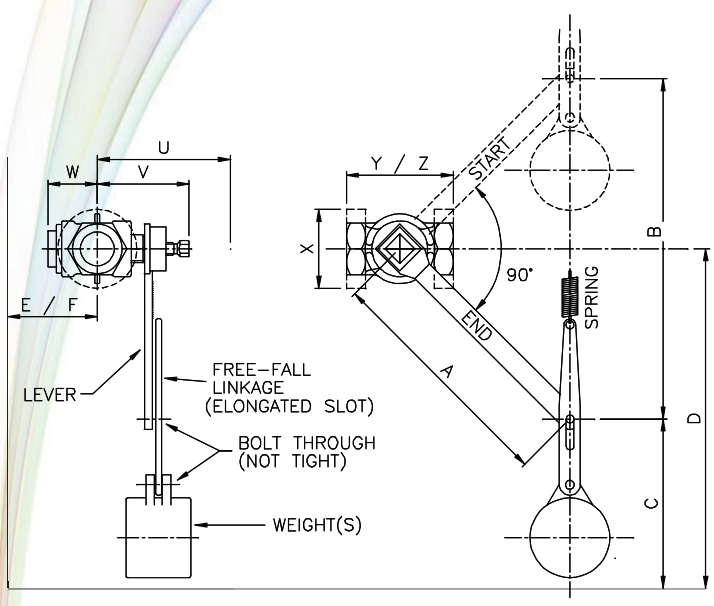
If using a grease injection gun, connect to the grease nipple at the end of the lubricating screw. If lubricating by hand remove the lubricating screw from the end of the square shaft. Fill the reservoir inside the shaft with lubricant and replace the screw. Tighten the screw until a definite increase in resistance is felt, inserting further lubricant as necessary. 'Pump' the valve lever up and down several times to ensure the valve is free-moving. If you have any questions or need any help then please contact our sales office.

Important:

These valves must be checked for function and lubricated at least 3 times a year to maintain efficient operation

Dimensions

Valve Size	Lever	Z	Y	X	W	V	U	A	B	C	D	E	F	Weight
½"	A	108	95	95	38	60	110	241	343	178	349	152	51	1 x 5lb
¾"	A	114	105	102	44	64	114	241	343	178	349	165	58	1 x 5lb
1"	A	121	115	114	51	73	125	241	343	178	394	191	64	1 x 5lb
1¼"	B	111	140	121	62	83	135	305	432	178	394	229	76	1 x10lb
1½"	B	117	150	133	68	90	144	305	432	229	444	254	76	1 x 15lb
2	C	178	165	152	83	125	213	381	540	229	502	330	102	1 x 15lb
2½"	C	191	185	165	94	135	222	381	540	229	502	330	102	1 x 15lb
3"	D	203	200	184	111	167	275	775	1092	251	800	457	152	1 x 15lb
4†"	E	229	---	216	141	184	297	629	864	251	683	470	165	1 x 15lb
5†"	E	254	---	254	160	213	327	737	864	251	683	559	178	1 x 15lb
6†"	F	267	---	279	184	241	356	737	1041	276	813	660	205	1 x 15lb



Important dimensions
E Min dist to remove plug with valve in-line
F Min dist to wall
U Clearance to remove lubricating screw
X Flange diameter
Y Length of screwed valve
Z Length of flanged valve

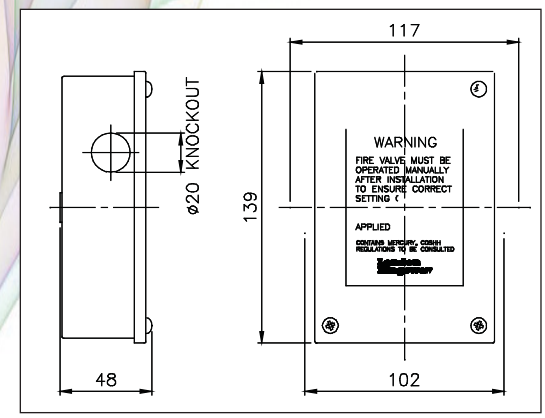
† The 4", 5" and 6" valves are only available in flanged versions.

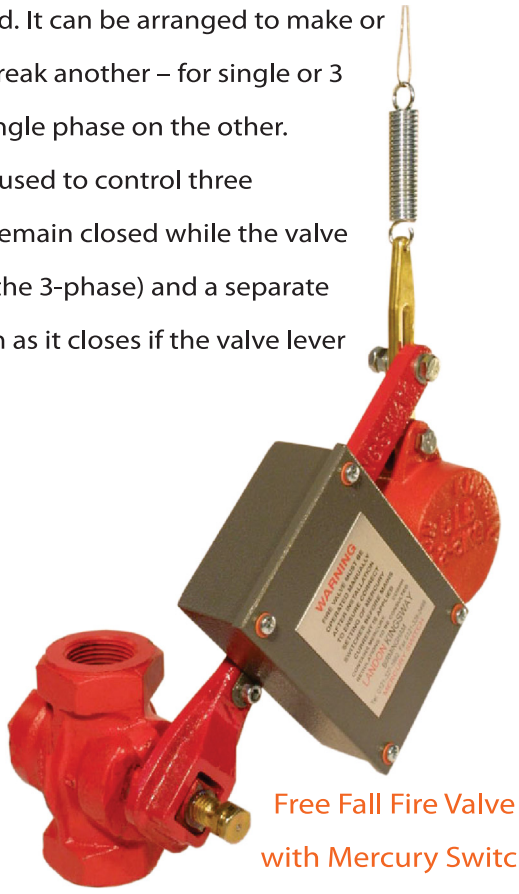
FREE FALL FIRE VALVE MERCURY SWITCH

The Free Fall Fire Valve Mercury Switch operates in conjunction with our free fall fire valves to set off an alarm, stop a burner or perform other operations in the event of a fire outbreak in the boiler house.

The device consists quite simply of a mercury switch mounted on the fire valve lever which is connected by electric cable to the equipment to be operated. It can be arranged to make or break a single connection or to make one connection and break another – for single or 3 phase supply – or even to utilise 3-phase on one side and single phase on the other. The three connections on the three-phase version could be used to control three single-phase devices. Both the single and 3 phase versions remain closed while the valve is in its' normal state (one contact on the single phase, 3 on the 3-phase) and a separate normally open contact that is suitable for sounding an alarm as it closes if the valve lever drops.

Dimensions

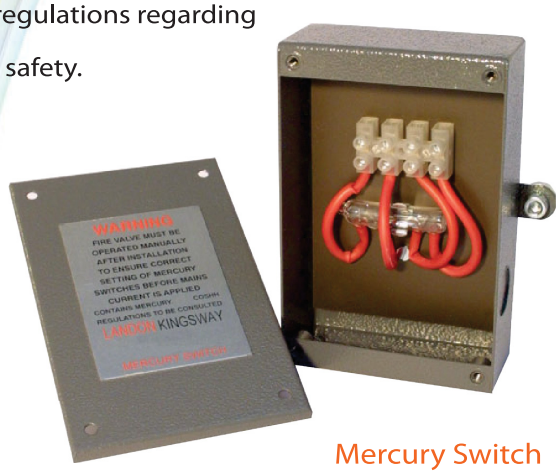




Free Fall Fire Valve with Mercury Switch

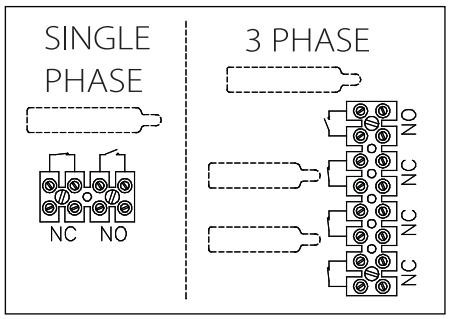
SAFETY INFORMATION

This device contains mercury inside a sealed glass vessel. Consult COSHH regulations regarding mercury safety.


WARNING
FIRE VALVE MUST BE OPERATED MANUALLY AFTER INSTALLATION TO ENSURE CORRECT SETTING OF MERCURY SWITCHES BEFORE MAINS CURRENT IS APPLIED
CONTAINS MERCURY. COSHH REGULATIONS TO BE CONSULTED
LANDON KINGSWAY
MERCURY SWITCH

Mercury Switch

Connection Diagram



SPARES FOR FREE FALL FIRE VALVE

Number	Spares	Option	Part Number
1	Stainless Steel Cable	30ft	10015708x1
		100ft	10015709x1
		500ft	10015710x1
		1000ft	10015711x1
		2500ft	10015712x1
2	Pulley with open eye wood thread	N/A	10903604x2
3	Pulley with open eye ¼" B.S.P thread	N/A	10903604x1
4	Cable Connector		10004501x5
5	Fusible Links	160F	10902801x1
		198F	10902803
		220F	10902805
		260F	10902806
		290F	10902808
		356F	10902810
6	Cable Strainer (Large)	N/A	99009701
7	Tension Spring (Large)	N/A	10034001
8	Wall Anchor Screw Wood Thread	N/A	10030301x1
9	Mind your head notice	N/A	10012101x1
10	Small gun-metal link for all valves (brass slotted)	N/A	10032902x1

Proprietà

DATA 4 ITALY

Progetto

DC 10

MILAN

Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	15/10/2021	DOE

DATA 4 ITALY - DC10

Fiche technique vanne motorisée / Motorized valve Datasheet

Scheda Elettrovalvole

C2Ai
Instrumentation et régulation des fluides

Vanne à bille laiton 2 voies avec ou sans col long mot.
2 ways ball valve with or without long check

REF. JR12 / JR13

JR12 / JR13

VANNE A BILLE LAITON, 2 VOIES AVEC OU SANS COL LONG, CDE ELECTRIQUE ER PREMIER
2 WAYS BRASS BALL VALVE WITH OR WITHOUT LONG NECK, ER PREMIER ELECTRIC ACTUATOR

DESCRIPTION

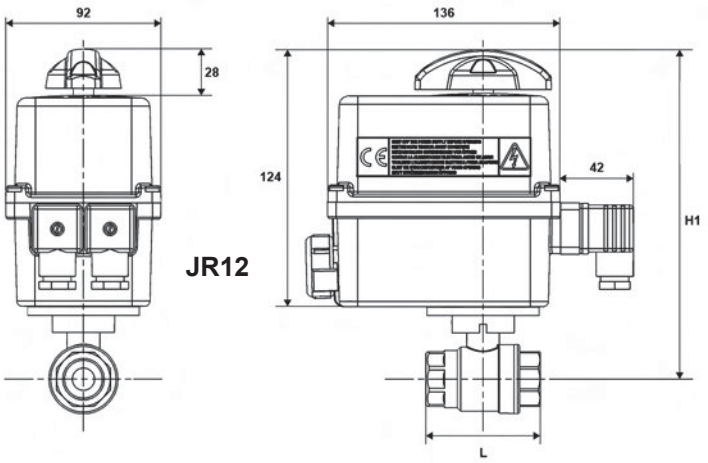
Vanne Laiton nickelé - Platine ISO - Taraudée BSP
Étanchéité NBR - Sièges PTFE
Pression de service: 6 Bar - Température fluide: -10°C +120°C*
Température actionneur : -10°C à +55°C
Commande manuelle de secours et manette
Indicateur de position de la vanne et du fluide
Câblage en 3 points modulants ou On/Off
4 Fins de course (2 pour le contrôle moteur, 2 pour la recopie)
Durée sous tension : 30% (50% sur demande) (CEI34)
Protection : IP65 (IP66 sur demande)
Raccordement électrique : 2 x connecteurs DIN43650 3P+T

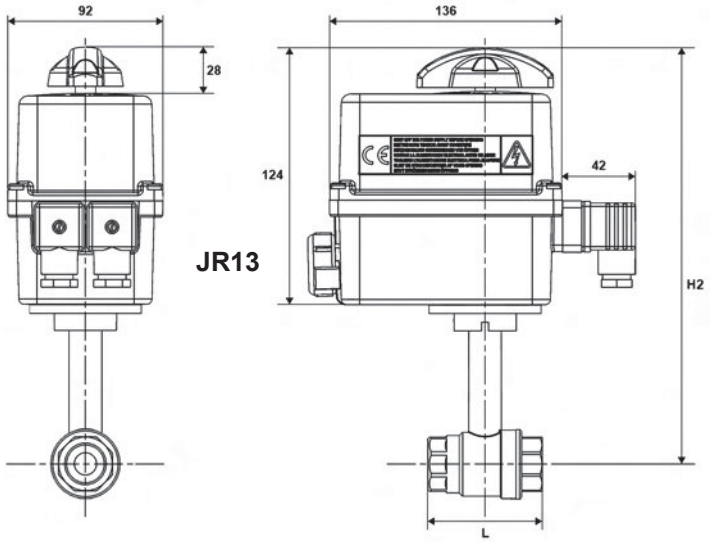
DESCRIPTION

Nickel-plated brass valve - ISO plate - BSP threaded
NBR shaft “o-ring” - PTFE ball seat
Working pressure: 6 Bar - Fluid temperature: -10°C +120°C*
Actuator temperature: -10°C to +55°C
Manual override and handle.
Indicator for valve and fluid position
3 modulating points or On/Off wiring type
4 limit switches (2 for motor control and 2 for feedback signal)
Duty rating : 30% (50% on request) (CEI34)
Enclosure: IP65 (IP66 on request)
Raccordement électrique : 2 x connectors DIN43650 3P+T

*** Plage de température du fluide accepté par la vanne seule. Pour la vanne motorisée, nous consulter au delà de 55°C**
Range of fluid temperature that the valve without the actuator can bear. For the actuated valve, consult us for more than 55°C

ENCOMBREMENTS / DIMENSIONS





Code	Code Col long Long neck	TAILLE SIZE	DN	L	H1	H2	Type	JR12	JR13
								.0A=90V-240V 50/60Hz ou/or (90V-350V DC) (13s) .03=24V 50/60Hz ou/or (24V DC) (12s)	
JR12.606.414...	JR13.606.414...	1/2"	15	56	190	241	ER20		
JR12.607.414...	JR13.607.414...	3/4"	20	66	194	244	ER20		
JR12.608.414...	JR13.608.414...	1"	25	75	200	250	ER20		
JR12.609.414...	JR13.609.414...	1"1/4	32	85	212	260	ER20		
JR12.610.414...	JR13.610.414...	1"1/2	40	97	217	266	ER20		
JR12.611.414...	JR13.611.414...	2"	50	109	224	283	ER20		

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JR12 + PBH

LAITON NICKELÉ
NICKEL PLATED BRASS

VANNE A BILLE LAITON, 2 VOIES AVEC REHAUSSE, CDE ELECTRIQUE ER PREMIER
2 WAYS BRASS BALL VALVE WITH EXTENDER, ER PREMIER ELECTRIC ACTUATOR

DESCRIPTION

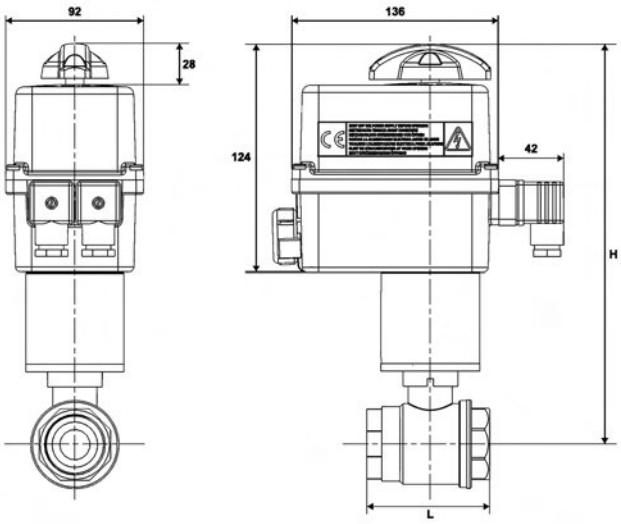
Vanne Laiton nickelé - Platine ISO - Taraudée BSP
Étanchéité NBR - Sièges PTFE
Pression de service: 6 Bar - Température fluide: -10°C +120°C*
Système de réchauffage intégré à la rehausse
Température actionneur : -10°C à +55°C
Commande manuelle de secours et manette
Indicateur de position de la vanne et du fluide
Câblage en 3 points modulants ou On/Off
4 Fins de course (2 pour le contrôle moteur, 2 pour la recopie)
Durée sous tension : 30% (50% sur demande) (CEI34)
Protection : IP65 (IP66 sur demande)
Raccordement électrique : 2 x connecteurs DIN43650 3P+T

DESCRIPTION

Nickel-plated brass valve - ISO plate - BSP threaded
NBR shaft “o-ring” - PTFE ball seat
Working pressure: 6 Bar - Fluid temperature: -10°C +120°C*
Heating system located in the extension socket
Actuator temperature: -10°C to +55°C
Manual override and handle.
Indicator for valve and fluid position
3 modulating points or On/Off wiring type
4 limit switches (2 for motor control and 2 for feedback signal)
Duty rating : 30% (50% on request) (CEI34)
Enclosure: IP65 (IP66 on request)
Raccordement électrique : 2 x connectors DIN43650 3P+T

*** Plage de température du fluide accepté par la vanne seule. Pour la vanne motorisée, nous consulter au delà de 55°C**
Range of fluid temperature that the valve without the actuator can bear. For the actuated valve, consult us for more than 55°C

ENCOMBREMENTS / DIMENSIONS



RÉSISTANCE CHAUFFAGE RÉHAUSSE*
EXTENDER ANTI-CONDESATION HEATER*

RP C-230/50	
RP C-24/50	

code facturation - invoicing code

PBR... = PBH + RPC...

*** Alimentation indépendante à prévoir**
* independent power supply

Code	TAILLE SIZE	DN	Type	L	H	JR12 + PBH **.0A=90V-240V 50/60Hz** ou/or **(90V-350V DC) (13s)** **.03=24V 50/60Hz** ou/or **(24V DC) (12s)**
JR12.606.414...+PBH	1/2"	15	ER20	56	250	
JR12.607.414...+PBH	3/4"	20	ER20	66	254	
JR12.608.414...+PBH	1"	25	ER20	75	260	
JR12.609.414...+PBH	1"1/4	32	ER20	85	272	
JR12.610.414...+PBH	1"1/2	40	ER20	97	277	
JR12.611.414...+PBH	2"	50	ER20	109	284	

SCHÉMA ÉLECTRIQUE ER PREMIER
ER PREMIER WIRING DIAGRAM

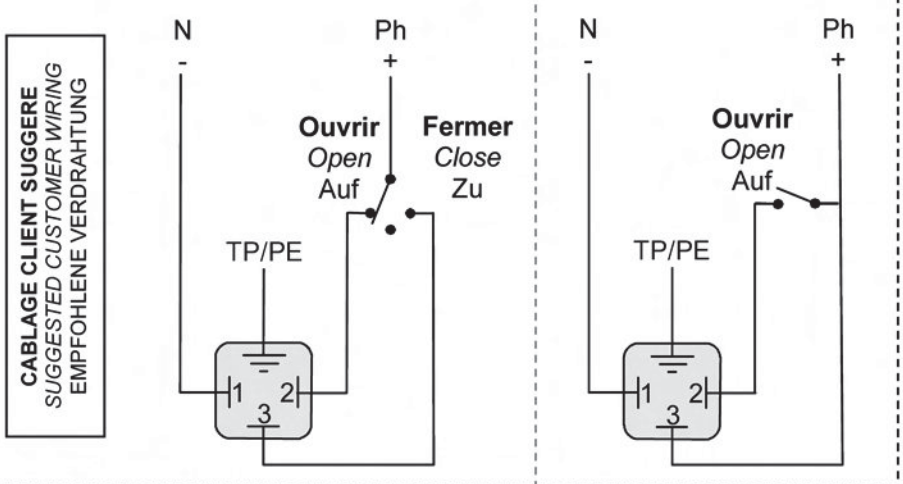
La température du bornier peut atteindre 90°C
The terminal temperature can reach 90°C
Die Terminal-Temperatur kann bis zu 90°C erreichen.
N.B. : Les câbles utilisés doivent être rigides (tensions pour la recopie : 4 à 250V AC/DC)
N.B.: The used wires must be rigid (feedback voltages : 4 to 250V AC/DC)
N.B.: Die Anschlusskabel müssen biegesteif sein (Rückmeldespannungen 4 bis 250V AC/DC)

ALIMENTATION : CONNECTEUR 3P+T DIN43650
POWER SUPPLY : 3P+T DIN43650 CONNECTOR
SPANNUNGSVERSORGUNG : 3P+T DIN43650 VERBINDUNG

Mode 3 points modulants
3-points modulating mode
3 Modulationspunkte Modus

Mode Tout ou rien (ON/OFF)
On-Off mode
Auf-Zu Modus

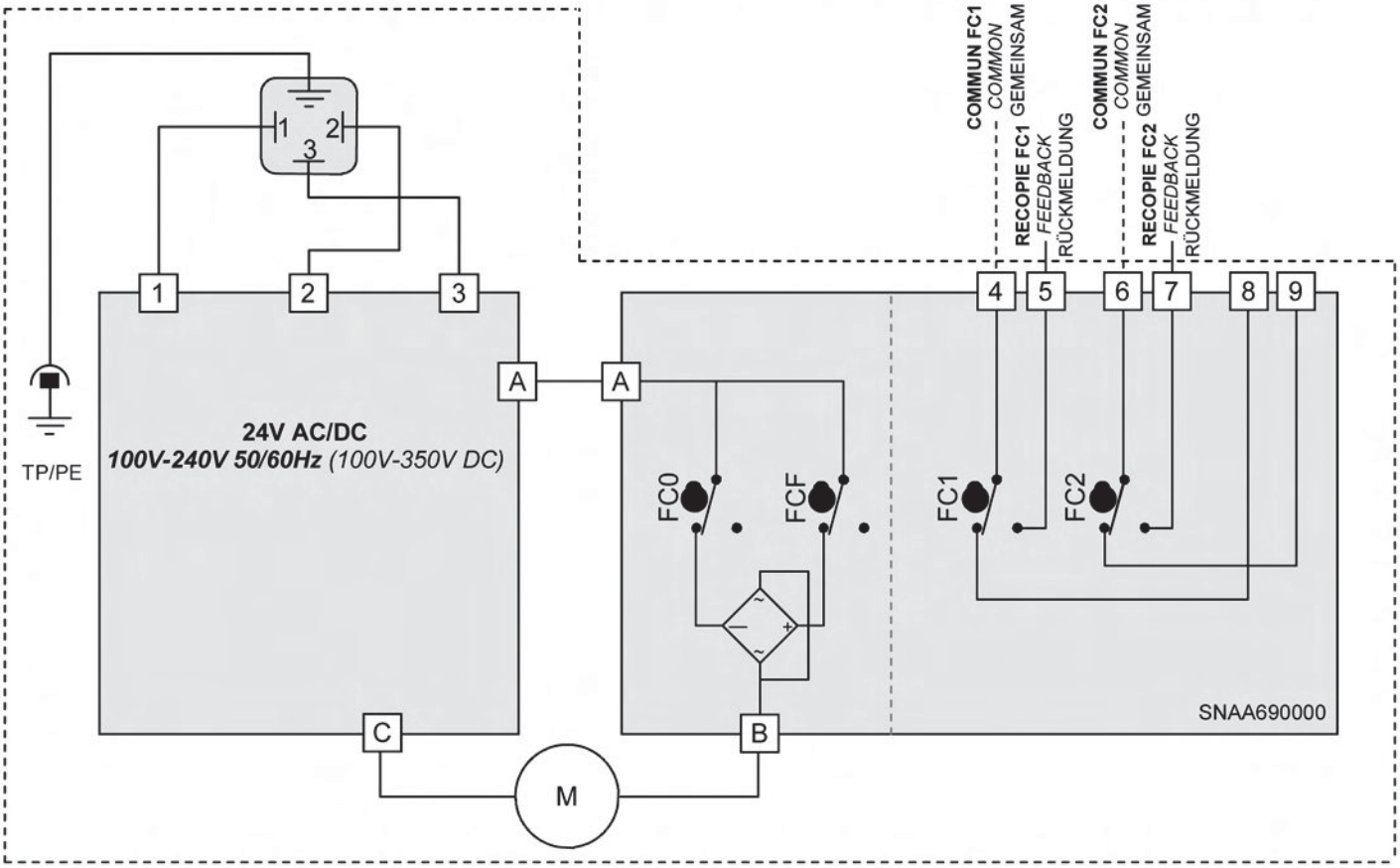
CABLAGE CLIENT SUGGERE
SUGGESTED CUSTOMER WIRING
EMPFOHLENE VERDRAHTUNG



REP	DESIGNATION BESCHREIBUNG
FC0	**Fin de course ouverture** *Open limit switch* Endschalter AUF
FCF	**Fin de course fermeture** *Close limit switch* Endschalter ZU
FC1	**Fin de course auxiliaire 1** *Auxiliary limit switch 1* Zusätzlicher Endschalter 1
FC2	**Fin de course auxiliaire 2** *Auxiliary limit switch 2* Zusätzlicher Endschalter 2
M	**Motor** *Motor* Motor

DSBL0443

RECOPIE / *FEEDBACK*
RÜCKMELDUNG



Document non contractuel - Nous nous réservons la possibilité de faire évoluer les caractéristiques de nos produits sans préavis

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Agence Est mulhouse@c2ai.com
Agence Sud-Ouest sudouest@c2ai.com
Service Export export@c2ai.com

contact@c2ai.com
www.c2ai.com

CERTIFICAZIONE

LA RASTELLI RUBINETTERIE SPA, PRODUTTRICE DI SARACINESCHE E VALVOLE A SFERA, CON SEDE IN INVORIO (NO), REGIONE MONTICELLI 10/14, COME DESCRITTO DALLA LEGGE N° 46 DEL 5 MARZO 1990 "NORME PER LA SICUREZZA DEGLI IMPIANTI" E DAL DPR N° 447 DEL 6 DICEMBRE 1991 "REGOLAMENTO DI ATTUAZIONE DELLA LEGGE 5 MARZO 1990 N° 46, IN MATERIA DI SICUREZZA DEGLI IMPIANTI"

D I C H I A R A

CHE LE SARACINESCHE

Art. 200	**Tipo pesante in bronzo**	**Art. 245**	**Chiusura rapida corpo in bronzo**
Art. 210	**Tipo normale in bronzo**	**Art. 255**	**Maschio/Femmina in ottone**
Art. 212	**Tipo ridotto in bronzo**	**Art. 240**	**Da incasso in ottone**
Art. 205	**Tipo pesante in ottone**	**Art. 225**	**Tubo rame a compressione in ott.**
Art. 215	**Tipo normale in ottone**	**Art. 226**	**Tubo rame a saldare in ottone**
Art. 220	**Tipo ridotto in ottone**	**Art. D26**	**Per pompa in ottone**
Art. 230	**Con spurgo in ottone**	**Art. D27**	**Per pompa con non ritorno in ott.**
Art. 260	**In bronzo flangiata**		

SONO PROGETTATE E COSTRUITE A REGOLA D'ARTE SECONDO LA SEGUENTE SPECIFICA :

 PARTI METALLICHE

- OTTONE IN BARRE TRAFILATE PER LAVORAZIONE DA TORNIO AUTOMATICO
  Designazione lega: CW 614 N - UNI –EN 12164
  Composizione chimica percentuale:

Cu	Pb	Sn max	Fe max	Al max	Ni max	Altre impurità totali max	Zn
57 ÷ 59	2,5÷3,5	0,3	0,3	0,05	0,3	0,2	Resto

- OTTONE IN BARRE ESTRUSE PER STAMPAGGIO A CALDO
  Designazione lega: CW 617 N - UNI –EN 12165
  Composizione chimica percentuale:

Cu	Pb	Sn max	Fe max	Al max	Ni max	Altre impurità totali max	Zn
57 ÷ 59	1,6÷2,5	0,3	0,3	0,05	0,3	0,2	resto

- OTTONE PER FUSIONE IN CONCHIGLIA
  Designazione della lega: DELTA CS UNI EN1982 - CB 753 S
  Composizione chimica percentuale:

Cu	Pb	Al	Sn max	Ni max	Mn max	Fe max	Si max	Zn
58 ÷ 60	1,8 ÷2,5	0,4 ÷ 0,8	0,8	0,5 ÷ 1,2	0,20	0,5 ÷ 0,8	0,05	resto

- BRONZO PER FUSIONE IN TERRA
  Designazione della lega: SN 5 UNI EN 1982 – DIN 50930/6
  Composizione chimica percentuale:

Cu	Sn	Pb max	Zn	Ni max	Fe max	Sb max	S max	P
83 ÷ 86,5	4,2 ÷6,0	3,0	4,5 ÷ 6,5	2,0	0,25	0,25	0,08	0,013

 FILETTATURE MASCHIO O FEMMINA CONFORMI ALLA NORMA ISO 228

 LAVORAZIONI MECCANICHE, ASSEMBLAGGIO DEI COMPONENTI E COLLAUDI A PRESSIONE SECONDO LE DIRETTIVE DEL MANUALE DELLA QUALITÀ CONFORME ALLE NORME UNI-EN-ISO 9002

RASTELLI RUBINETTERIE S.p.A.

Quality Assurance Departement

Proprietà

DATA 4 ITALY

Progetto

DC 10
MILAN

Supervisore delegato del committente

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Opere edili e prefabbricati

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Impianti meccanici

OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.
Via Chiese, 72 - 20126 - MILANO
www.engie-axima.fr
Tél. : +39 02 8180951
Fax : +39 02 8135163

impianti elettrici/dati

ENGIE CONTRACTING ITALIA S.r.l.
Via Chiese, 72 - 20126 - MILANO
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Tél. : +39 02 94399262
Fax : +39 02 94399655

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ENERIA
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www.eneria.fr
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Fax : +33 (0) 169802150

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Fax : +39 02 89051501

Cod	Data	Descrizione
	15/102021	DOE

DATA 4 ITALY - DC10
Fiche vanne pompier / Quick opening valve Datasheet
Scheda Saracinesche Gasolio

rastelli rubinetterie s.p.a.

SCHEDA TECNICA

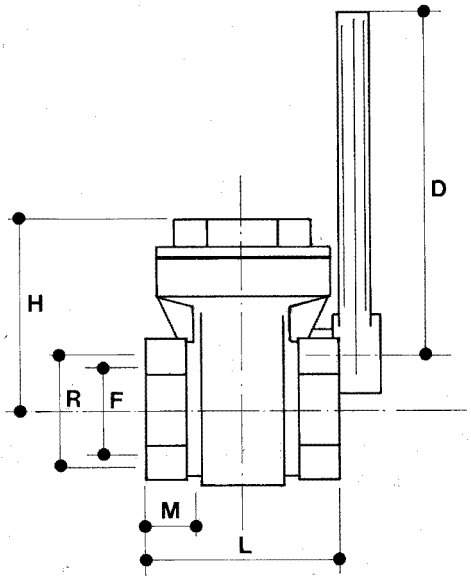
Art 245

Saracinesca in bronzo a chiusura rapida, F x F

DECRETO LEGISLATIVO 25/02/2000 N° 93
il prodotto illustrato nella presente scheda tecnica soddisfa i requisiti della direttiva PED 97/23/CE ed e' esentato dalla marcatura CE in base all'art.3 par. 3.

1 - Caratteristiche

Corpo in bronzo SN 5 UNI-EN1982 DIN 50930/6
Tappo e disco in ottone DELTA CS UNI-EN1982 CB 7535
Asta, ferma asta e premistoppa in ottone CW 614 N - UNI-EN12164
Guarnizione corpo fibra guarnital
Guarnizione asta DUTRAL EPDM90
Leva di comando in alluminio plastificato con resina epossidica rossa
Dado fissa volantino in acciaio zincato
Finitura sabbiata
Filettatura EN-ISO 228/1



2 - Dimensioni principali

R"	3/8	1/2	3/4	1	1 ¼	1 ½	2	2 ½	3	4
L	44	46	51	57	61	67	77	86	91	102
H	40	40	48	55	62	68	81	108	121	148
D	80	80	100	100	120	137	165	205	205	205
F	15	15	20	25	32	37	47	58	72	92
M	9	10	10	12	14	15	16	16	18	20

3 - Campo di impiego (PED 97/23/CE art.9)

Alle pressioni e temperatura indicate nella tabella 4 le valvole sono utilizzabili per i seguenti fluidi:

Liquidi pericolosi (Tab.8);

Liquidi non pericolosi (Tab. 9);

Quanto sopra dichiarato è valido a condizione che i fluidi non siano aggressivi per le leghe di rame (bronzo-ottone).

4 - Pressioni di esercizio a max 80°C

R"	3/8	1/2	3/4	1	1¼	1½	2	2½	3	4
PN 10	●	●	●	●	●	●	●	○	○	○
PN 6	○	○	○	○	○	○	○	●	●	●

5 -Spessori minimi

R"	3/8	1/2	3/4	1	1 ¼	1 ½	2	2 ½	3	4
mm	1,6	1,7	1,8	2,0	2.2	2,3	2,5	2,8	3,1	3,3

6 - Istruzioni per l'uso

L'impiego di questa saracinesca, caratterizzata dalla rapidità della manovra di apertura o di chiusura, è limitato ai casi in cui ci sia la necessità di un intervento tendente ad interrompere istantaneamente il flusso: ad esempio lo spillamento da un serbatoio.

Valvola a saracinesca in bronzo, caratterizzata dalla rapidità della manovra di apertura e di chiusura.
L'impiego di questa saracinesca è limitato ai casi in cui ci sia la necessità di un intervento tendente ad interrompere istantaneamente il flusso: ad esempio lo spillamento da un serbatoio.
Attacchi filettati femmina/femmina.
Attacchi filettati ISO 228 (equivalente a DIN EN ISO 228 e BS EN ISO 228).
Si consiglia di prestare attenzione nella fase di installazione, soprattutto per le saracinesche di piccole dimensioni, evitare di forzare l'avvitamento del tubo e di deformare le sedi di tenuta. Le saracinesche possono essere utilizzate anche in posizioni di apertura intermedie, in modo tale da parzializzare la portata nelle condotte.

INSTALLAZIONE

Togliere la valvola dal suo imballaggio e verificare che i percorsi di flusso e le filettature siano puliti e privi di residui di lavorazione.
Controllare i contrassegni sul corpo per assicurarsi che sia stata selezionata la valvola corretta per l'installazione.
Le valvole a saracinesca Rastelli sono fabbricate secondo standard rigorosi e, pertanto, non dovrebbero essere soggette ad un uso improprio.

Prestare la massima attenzione :
- Nel maneggiare la valvola (Le valvole non devono essere sollevate usando il volantino o l'asta);
- Allo sporco e ai detriti che possono entrare all'interno della valvola;
- Alla forza eccessiva impiegata durante il montaggio e l'azionamento del volantino.

Verificare che la lunghezza della filettatura del tubo sia corretta per evitare un'eccessiva penetrazione del tubo nella valvola che altrimenti causerebbe danni alla valvola.
Non eccedete nell'uso di materiali di guarnizione come (PTFE o canapa), usateli esclusivamente sul tubo e non nei filetti della valvola. Il composto in eccesso verrà forzato verso l'esterno e non entrerà nella valvola.
L'uso eccessivo di materiali di tenuta può causare danni alla valvola sulle estremità del corpo.
I filetti devono essere accoppiati correttamente quando si serra la valvola sul tubo.
Posizionate la chiave per il serraggio nella parte della valvola più vicina al tubo.
Gravi danni possono essere causati alla vostra valvola (asta e sedi) se volantini più grandi di quelli originariamente forniti dal produttore dovessero venire utilizzati.

MANUTENZIONE

Non è richiesta alcuna cura estetica particolare per questo prodotto.
Una regolare manutenzione è il metodo migliore per garantire l'efficienza operativa a più lungo termine della vostra valvola a saracinesca.
Il programma di manutenzione dovrebbe includere una valutazione del rischio e una procedura pianificata su come verrà eseguita la manutenzione stessa.
Per le attività di manutenzione delle valvole devono essere utilizzati strumenti e attrezzature di montaggio idonei. Devono essere previste adeguate tecniche per lo svuotamento delle tubazioni durante le operazioni di manutenzione delle valvole.

SMALTIMENTO

Se la valvola opera a contatto con fluidi tossici o pericolosi, prendere le necessarie precauzioni ed effettuare la pulizia dai residui eventualmente intrappolati nella valvola. Il personale addetto deve essere adeguatamente istruito ed equipaggiato dei necessari dispositivi di protezione.
Prima dello smaltimento, smontare la valvola e suddividere i componenti in base al tipo di materiale.
Consultare le schede prodotto per maggiori informazioni. Avviare i materiali così suddivisi al riciclaggio (per es. materiali metallici) o allo smaltimento, in accordo alla legislazione locale in vigore e nel rispetto dell'ambiente.

Quick opening bronze gate valve

The use of this gate valve, quick in opening and closing, is limited to the cases where it is necessary to stop the flow instantly: for example to tap a dose of liquid from a tank.

Female/female threads.

Threads: ISO228 (equivalent to DIN EN ISO 228 and BS EN ISO 228).

Pay attention during the installation phase, especially for the small size ones, avoid forcing the pipe screwing in order not to deform the sealing seats.

Gate valves can also work at an intermediate position of the opening, so as to reduce the flow into pipes.

HOW TO INSTALL

Unpack the valve and check that the flow paths and valve threads are clean and free from debris. Check the body markings to ensure that the correct valve has been selected for installation.

Rastelli gate valves are manufactured to exacting standards and, therefore, should not be subjected to misuse.

The following should be avoided:

- Careless handling of the valve (Valves should not be lifted using the hand wheel, lever or the stem).
- Dirt and debris entering the valve through the end ports.
- Excessive force during assembly and hand wheel operation.

Confirm that the pipe threading length is correct to avoid excessive penetration of the pipe into the valve that would otherwise cause damage. Care should be taken to apply jointing compound to the pipe only and not in the valve threads. Surplus compound will then be forced outwards and will not enter the valve. Over use of compound can lead to valve failure on the body ends. Threads should be engaged correctly when tightening the valve onto the pipe. The wrench should always be fitted on the body end adjacent to the joint being made. Severe damage can occur to stems, valves and seats by the use of hand wheels larger than those originally supplied by the manufacturer, and by wheel keys.

MAINTENANCE

No aesthetic care is required for this product.

A regular maintenance program is the most efficient method to ensure a long term efficiency of your gate valve. The program should include a risk assessment and a planned procedure of how the maintenance will be carried out.

The correct fitting tools and equipment should be used for valve maintenance. Separate means of draining the pipe work must be provided when carrying out any maintenance to valves.

DISPOSAL

For valve operating with hazardous liquids(toxic, corrosive...) , if there is a possibility of residue remaining in the valve, take due safety precaution and carry out required cleaning operation. Personnel in charge must be trained and equipped with appropriate protection devices.

Prior to disposal, disassemble the valve and separate the component according to various materials. Please refer to product literature for more information. Forward sorted material to recycling (e.g. metallic materials) or dispose it, according to local and currently valid legislation taking into consideration the environment.

CORPO
Bronzo SN 5 UNI-EN 1982 DIN 50930/6

ASTA, FERMA ASTA E PREMISTOPPA
Ottone CW614N-UNI-EN 12164

TAPPO E DISCO
Ottone DELTA CS EN1982 CB 7535

GUARNIZIONE CORPO
Fibra GUARNITAL

GUARNIZIONE ASTA
DUTRAL EPDM90

VOLANTINO
alluminio plastificato con resina epossidica rossa

DADO DI FISSAGGIO
Acciaio zincato

FINITURA SUPERFICIALE
Sabbiata

BODY
Bronze SN 5 UNI-EN 1982 DIN 50930/6

STEM, STOP RING AND GLAND
Brass CW614N-UNI-EN 12164

WEDGE AND CAP
Brass DELTA C EN1982 CB 7535

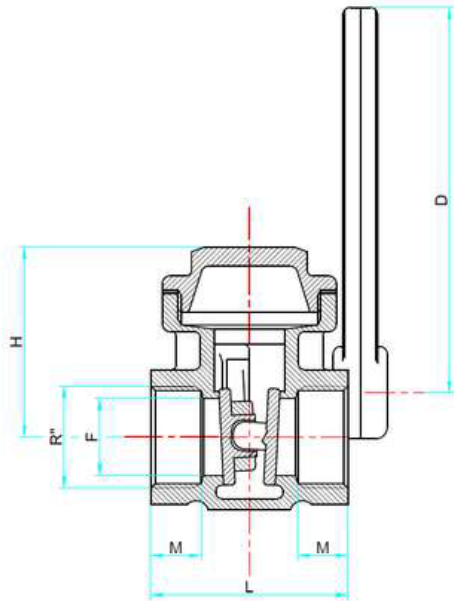
BODY WASHER
Fiber GUARNITAL

STEM PACKING
DUTRAL EPDM90

HANDWHEEL
Aluminum handwheel with red epoxydixccoating

FIXING NUT
Zinc plated steel

FINISHING
Sand blast



R"	DN	L	H	D	F	M	PN
1/2"	15	46	40	80	15	10	10
3/4"	20	51	48	100	20	10	10
1"	25	57	55	100	25	12	10
1"1/4	32	61	62	120	32	14	10
1"1/2	40	67	68	137	37	15	10
2"	50	77	81	165	47	16	10
2"1/2	65	86	108	205	58	16	6
3"	80	91	121	205	72	18	6
4"	100	102	148	205	92	20	6

Le misure riportate in tabella sono espresse in mm
All measures in the charts are expressed in mm

AII.6.7 Indicatore elettrico di livello serbatoio principali interrati.

CE

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DECLARATION DE CONFORMITE CE
EC DECLARATION OF CONFORMITY
EG-KONFORMITÄTSERKLÄRUNG
DECLARACIÓN DE CONFORMIDAD CE
DECLARAÇÃO DE CONFORMIDADE CE

Nom du Fabriquant/Manufacturer's name/Name des Herstellers/Nombre del fabricante/Nome do fabricante

INTERJAUGES Sarl
Siret : RC 322 033 184

Adresse/Address/Anschrift/Dirección/Endereço

24 Route de Chatillon
28290 Commune nouvelle d'Arrou
FRANCE

Déclare sous sa seule responsabilité en qualité de fabriquant que le produit :
Declares under its sole responsibility as a manufacturer that the product:
Erklärt unter seiner alleinigen Verantwortung als Hersteller, dass das Produkt:
Declara bajo su exclusiva responsabilidad como fabricante que el producto:
Declara sob sua exclusiva responsabilidade como fabricante que o produto:

Série JE 100

Est conforme aux directives suivantes/is in accordance with/mit den folgenden Richtlinien übereinstimmt/Cumple con las siguientes directrices/Cumpre as diretrizes seguinte

- **2014/35/EU (LVD)**
- **2014/30/EU (EMC)**
- **2011/65/EU (RoHs)**

Pour évaluer la conformité, les normes suivantes ont été consultées :
To assess conformity the following standards were consulted:
Zur Beurteilung der Konformität wurden die folgenden Normen herangezogen:
Para evaluar la conformidad se consultaron las siguientes normas:
Para avaliar a conformidade os seguintes padrões foram consultados:

- **EN 61010 (LVD)**
- **EN 61326 (EMC)**

Arrou le 01/12/2018

Yannick Moinet
Gérant Interjauges Sarl

iNTERJAUGES
24 ROUTE DE CHATILLON
28290 COMMUNE NOUVELLE D'ARROU
http://www.interjauges.fr
Mél : commercial@interjauges.fr

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CONVERTISSEUR CUB233

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Proprietà

DATA 4 ITALY

Progetto

DC 10
MILAN

Supervisore delegato del committente	**GIS.IMO S.r.l.** centro direzionale quattrotorri 06132 PERUGIA	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Assistente del committente	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Progetto architettonico	**GARRETTI ASSOCIATI S.r.l.** via Trieste, 9 - 20146 MILANO www.garrettiassociati.it	Tél. : +39 02 430 6931 Fax : +39 02 480 170 51
Opere edili e prefabbricati	**GENERALE PREFABBRICATI S.p.a** centro direzionale quattrotorri 06132 PERUGIA www.generaleprefabbricatispa.com	Tél. : +39 075 517 29 83 Fax : +39 075 518 12 88
Impianti meccanici	**OMEGA CONCEPT IMPIANTI E SISTEMI S.p.a.** Via Chiese, 72 - 20126 - MILANO www.engie-axima.fr	Tél. : +39 02 8180951 Fax : +39 02 8135163
impianti elettrici/dati	**ENGIE CONTRACTING ITALIA S.r.l.** Via Chiese, 72 - 20126 - MILANO www.engie.com	Tél. : +39 02 94399262 Fax : +39 02 94399655
	SCHNEIDER ELECTRIC S.p.A. Via Circonvallazione Est, 1 - 24040 STEZZANO (BG) www.schneider-electric.com	Tél. : +39 0354151111 Fax : +39 0354153200
	ENERIA Rue de Longpont - BP 10202 - 91311 MONTLHERY Cedex - FRANCE www.eneria.fr	Tél. : +33 (0) 169802100 Fax : +33 (0) 169802150
Progettazione antincendio	**STUDIO TECNICO ZACCARELLI S.r.l.** via Ludovico il Moro, 17 - 20143 MILANO www.studiozaccarelli.it	Tél. : +39 02 891 200 81 Fax : +39 02 813 962 8
Supervisione	**ITALSOCOTEC S.p.a.** Via Pontaccio,12/A- 20121 Milano italsocotec@italsocotec.it	Tél. : +39 02 89051500 Fax : +39 02 89051501

Cod	Data	Descrizione
	15/10/2021	DOE

DATA 4 ITALY - DC10
Fiche technique jauge / Gauge Datasheet
Scheda Indicatore serbatoio

Jauge électrique
JE100

- **De 1250 à 3000 mm de hauteur**
- **Transmission par renvoi d'angle**
- **Montage sur manchon 2"**
- **Tête IP67**
- **2 fonctions possibles :**
  De 1 à 2 contacts secs
  1 sortie continue (Ω)

APPLICATIONS

Transmetteur de niveau en continu ou alarme niveau bas et/ou haut dans les cuves situées en intérieur ou extérieur :

Exemple de liquides :
- Fuel
- Huile
- Eau glycolée
- Eau de pluie

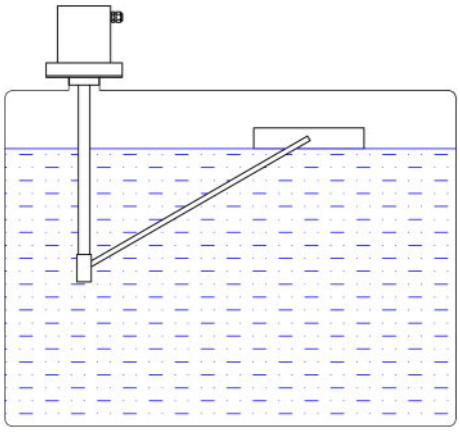
Particulièrement adapté pour répondre aux besoins et conditions d'emploi des capacités d'alimentation en fuel de groupes électrogènes placés à l'extérieur.

DESCRIPTION

Sous la poussée du fluide, le flotteur entraine un axe solidaire d'un renvoi d'angle 90°.
Ce mouvement peut agir sur un potentiomètre qui délivre une valeur ohmique image de la mesure ou des contacts pour transmettre une alarme.

La jauge électrique se positionne sur le haut de la cuve.

Le matériel est livré réglé, étalonné, et prêt à poser.



CARACTÉRISTIQUES TECHNIQUES

Matériaux	Acier, Nylon *Flotteur : PVC expansé* *Sur demande : Acier Inox 316L*
Joint Bride	en liège
Montage	Raccord 2" GAZ mâle
Tête Jauge	Nylon, IP67 1 presse étoupe de 13 mm
Pression	Atmosphérique
Température	De 0 à 40 °C
Contacts	Réglage par défaut : 1 ou 2 contacts inverseurs, 10 A, 230 V, libre de potentiel Alarme niveau haut : 90% Alarme niveau bas : 25% *Autres réglages possibles de 20 à 90 % sur demande.*
Sortie ohmique	Potentiomètre De 0 à 215 Ω (indicatif, ±15 %)

579

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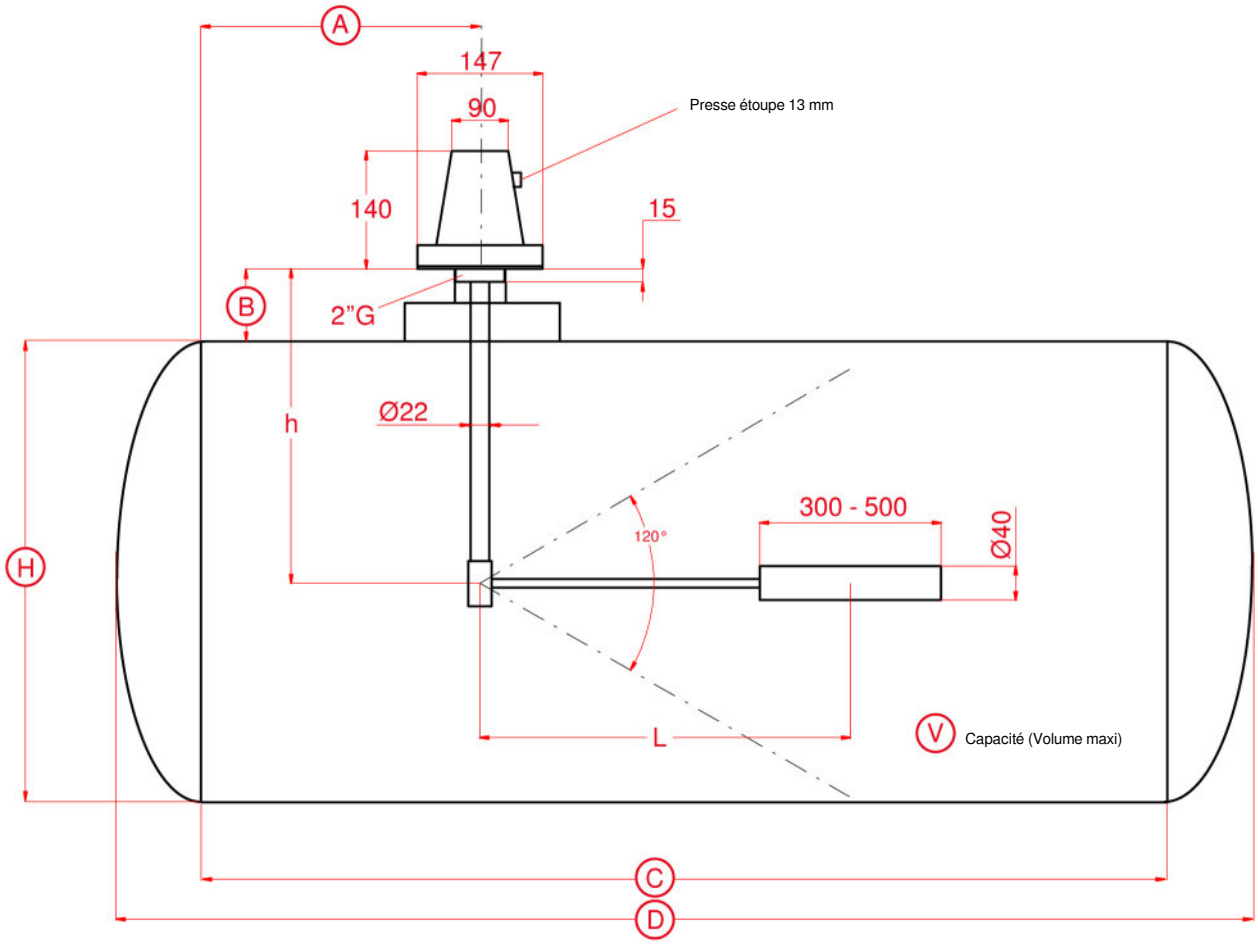
CODES ET RÉFÉRENCES

Code	Référence	Description
579 010	JE100	Sortie ohmique
579 012	JE100 C	Sortie ohmique + 1 contact (alarme niveau BAS)
579 639	CE-102 IP67	1 contact (alarme niveau BAS)
579 643	CE-103 IP67	2 contacts (alarme niveau BAS et HAUT)

DIMENSIONS

Schéma d'encombrement (non à l'échelle)



Les cotes A, B, C, D et H ainsi que la capacité V du réservoir sont à fournir par le client.
Si le réservoir a une forme rectangulaire, le client doit également préciser sa largeur.

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Electric gauge
JE100

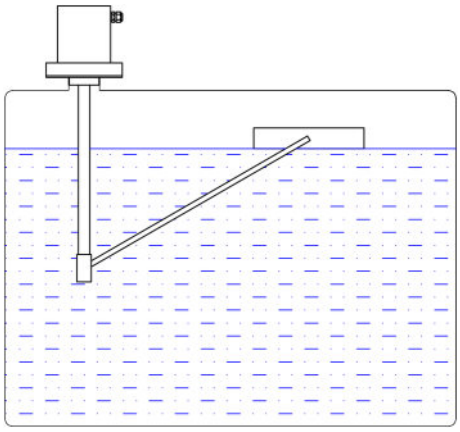
- **Tank height from 1250 to 3000 mm**
- **Transmission: angle drive**
- **Fitting: male 2” BSP**
- **Head housing: IP67**
- **2 possible functions:**
  With 1 or 2 contacts, potential free
  With continuous resistive signal (Ω)

APPLICATIONS

These controllers for alarms on low, high levels, and transmitters of continuous level, are designed for indoor or outdoor tanks.

Liquid storage examples:
- Diesel
- Lubricating oil
- Glycol water
- Rainwater

They are particularly well adapted to use and needs of storage or day-tank on diesel generators located outdoor.



DESCRIPTION

Under the thrust of the fluid, the float transmits the level through an angle drive to a vertical stem.
The stem is then actuating a potentiometer (resistive output) and/or actuates contacts (alarms).

The electric gauge is mounted above the tank.

The complete system is supplied ready to install and to use.

TECHNICAL FEATURES

Materials	Steel, Nylon *Float: Foamed PVC* *On request: Stainless steel (316L)*
Flange seal:	Cork gasket
Mounting	BSP 2", male fitting
Head housing	Nylon, IP67 1 pressure gland 13 mm
Pressure	Atmospheric
Temperature	Between 0 and 40 °C
Contacts	Default setting: 1 or 2 contacts (2 way contact), 10 A, 230 V, potential free HIGH level alarm: 90 % LOW level alarm : 25 % *On request: Factory adjustment between 20 and 90 %.*
Continuous signal output	Resistive signal From 0 to 215 Ω (approx., ±15 %)

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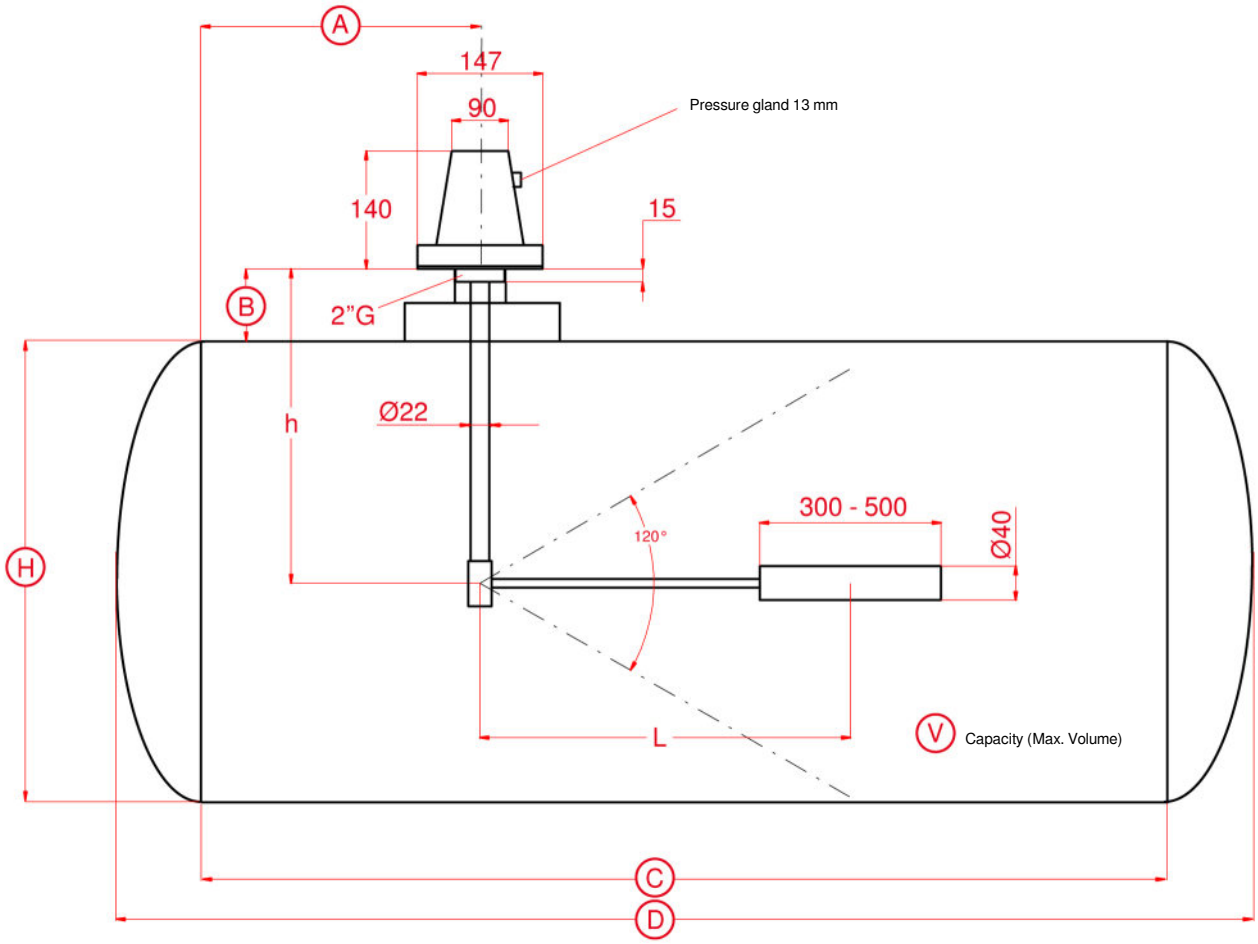
CODE NUMBERS AND REFERENCES

Code	Reference	Description
579 010	JE100	Resistive output
579 012	JE100 C	Resistive output + 1 contact (LOW level alarm)
579 639	CE-102 IP67	1 contact (LOW level alarm)
579 643	CE-103 IP67	2 contacts (LOW and HIGH level alarms)

DIMENSIONS

Dimensional (not to scale)



Dimensions A, B, C, D, H and V must be confirmed on purchase order.
In case of a rectangular shaped tank, the width must be mentioned as well.

579

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LIVELLO ELETTRONICO
JE 100

- Da 1250 a 3000 mm di altezza
- Trasmissione del cambio
- Montaggio su manicotto da 2 "
- Testa IP67
- 2 possibili funzioni:
  Da 1 a 2 contatti puliti
  1 uscita continua (Ω)

APPLICAZIONI

Trasmettitore di livello continuo o allarme di basso e / o alto livello in serbatoi situati all'interno o all'esterno:

Esempio di liquidi:
- Carburante
- Olio
- Acqua glicoli
- Acqua piovana

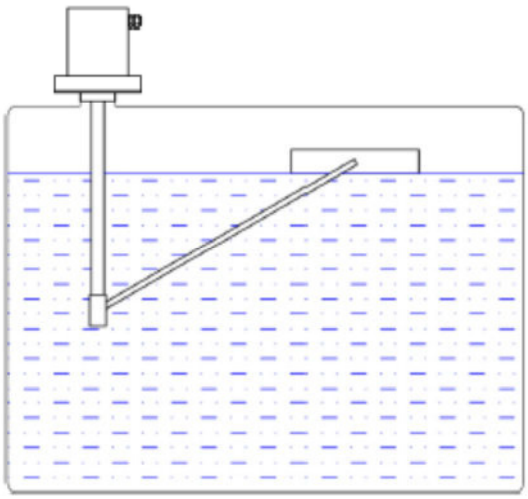
Particolarmente adatto a soddisfare le esigenze e le condizioni di utilizzo della capacità di alimentazione del combustibile di generatori collocati all'esterno.

DESCRIZIONE

Sotto la pressione del fluido, il galleggiante provoca un asse integrale di un angolo di 90 °.
Questo movimento può agire su un potenziometro che fornisce un valore di resistenza dell'immagine della misura o dei contatti per trasmettere un allarme.

L'indicatore elettrico è posizionato sulla parte superiore del serbatoio.

Il materiale viene consegnato impostato, calibrato e pronto per l'installazione.



CARATTERISTICHE TECNICHE

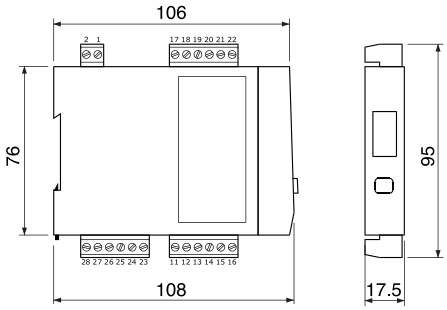
Materiali:	acciaio, nylon, Galleggiante in PVC espanso A richiesta: acciaio inossidabile 316L
Flangia :	sughero
Montaggio:	connessione GAS maschio 2 "
Calibro:	IP67 1 pressacavo da 13 mm
Pressione:	atmosferica
Temperatura:	da 0 a 40 ° C
Lunghezze:	Modello 1: da 250 a 1100 mm, Modello 2: da 1100 a 3000 mm
Graduazione	Litri
Contatto	Regolazione in fabbrica: 1 o 2 contatti di scambio, 10 A, 230 V, senza potenziale Allarme di alto livello: 90% Allarme di basso livello: 25% Altre impostazioni possibili dal 20 al 90% su richiesta.

Uscita ohmica: potenziometro
Da 0 a 215 Ω (indicativo, ± 15%)

Convertisseur universel
CUB-233

233

- **1 entrée universelle mA, V, Pt 100, potentiomètre, résistance**
- **Alimentation capteur**
- **2 sorties analogiques**
- **2 sorties relais**
- **Paramétrage par joystick ou PC**
- **Fonction linéarisation et tarage**
- **Alimentation universelle 80...256 V AC 50-60 Hz / 20...240 V DC**



APPLICATIONS

Pour toutes vos applications de conversion et isolement de signaux :
- Sondes de niveau avec sortie potentiométrique
- Sondes de niveau 2 fils, boucle 4-20 mA
- Capteurs de température Pt 100, thermocouple
- Conversion de signaux (effet loupe)
- Linéarisation spéciale (100 points)
- Alarme simple pour tous ces capteurs

DESCRIPTION

Le convertisseur universel 233 est la solution pour toutes applications de conversion et d'isolement de signaux.
Deux sorties analogiques pourront être assignées en mA ou en mV et deux sorties relais pourront être réglées sur toute l'échelle d'entrée (valeur, hystérésis et temporisation).

CARACTÉRISTIQUES TECHNIQUES

Tension d'alimentation	0...256 V AC, 50-60 Hz et 20...240 V DC sans polarité
Consommation	<4 VA
Affichage	Écran d'aide LCD graphique
Température ambiante	-10...+60 °C
Indice de protection	IP 20
Montage	Boîtier rail DIN 17.5 mm
Connexion	4 borniers débrochables
Programmation	Paramétrage par joystick ou via PC

Entrée universelle :

Courant	0-20 ou 4-20 mA
Tension	0-100 mV ou 0-10 V
Thermomètre à résistance	Pt 100 – Pt 1000, 2 ou 3 fils
Résistance 2 fils	1 kΩ – 5 kΩ – 10 kΩ – 50 kΩ
Table pour PTC et NTC	Calibre 1 kΩ – 5 kΩ – 10 kΩ – 50 kΩ, programmable avec logiciel BLOG-CUB
Thermocouple	J, K, T, B, R, S, E, NiMo, N, W3/D, W5/C, P
Potentiomètre	De 470 Ω à 100 kΩ
Alimentation capteur	Capteur 2 ou 3 fils : Max 19V et 26 mA

2 sorties analogiques et 2 relais

Courant	0-20 et/ou 4-20 mA (Impédance < 700 Ω)
Tension	0-10 V (Impédance >2 kΩ)
Relais	Inverseur – 500 mA / 250 V

Conformité CE : L'appareil satisfait aux exigences légales des Directives Européennes en vigueur.

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CODES ET RÉFÉRENCES

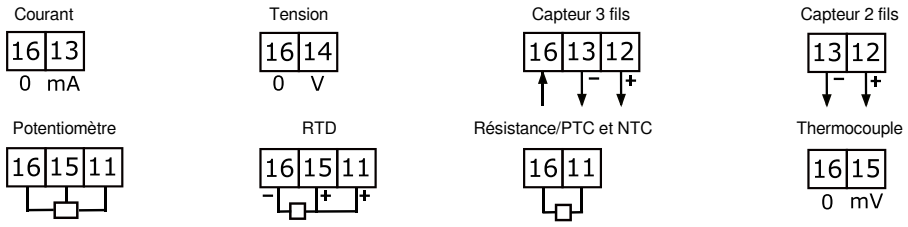
Code	Référence	Désignation
233 200	CUB-233	Convertisseur universel
233 205	CUB	Interface de communication
233 206	BLOG-CUB	Logiciel de paramétrage

FONCTIONS

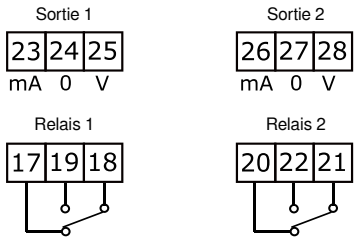
Type d'affichage	LCD vert, non rétroéclairé
Affichage	Entrée en valeur réelle et en valeur programmée Sorties en valeur programmée et pourcentage État des relais
Ajustement d'affichage	Décalage automatique de la résolution d'affichage en fonction de la valeur de la température
Facteur d'échelle en entrée	Permet un effet loupe sur l'entrée soit en manuel soit en automatique
Facteur d'échelle en sortie	Permet un effet loupe sur la sortie et sur l'affichage
Programmation	Programmation par joystick 5 positions en face avant
Mémoire Mini / Maxi	Mémorisation de la valeur maximale et minimale de la mesure
Mémorisation	Possibilité de mémorisation en sortie, de la dernière valeur mesurée en cas de rupture capteur
OffSet	Réglage de l'OffSet d'entrée sur tout type d'entrée
Tarage	Fonction tarage en entrée process
Simulation	Permet d'agir sur les sorties analogiques, relais, et sur l'affichage indépendamment de l'entrée et sans déconnecter ni l'entrée, ni les sorties
Limitation de sortie	Possibilité de limitation de la valeur de sortie Limitation haute et Limitation Basse
CSF	Compensation de soudure froide par capteur numérique 16 bits
Sécurité capteur	Traduit la rupture capteur sur l'affichage et sur les sorties relais et analogiques (en saisissant une valeur de repli)
Linéarisation en 100 points	Permet de créer une fonction de sortie par segmentation du signal d'entrée. Ex : Volume cuve cylindrique couchée / Hauteur
Linéarisation PTC - NTC résistive	Permet de créer la courbe PTC ou NTC par segmentation du signal d'entrée (programmable uniquement par le logiciel IXLOG-ULCOS via ulcos 100)
Seuils	Mode simple ou mode bande, avec sécurité positive ou négative Réglage des seuils de l'hystérésis et de la tempo (indépendante à la montée ou à la descente) Accès directs aux seuils, mémorisation et acquittement d'alarme
Acquittement des alarmes	Indépendant pour chacune des alarmes
Mémorisation des alarmes	Indépendante pour chacune des alarmes
Autres fonctions	Cut Off – Résolution 1 ou 10 points – Position de la virgule – Filtrage – Verrouillage du joystick – Réglage du contraste de l'afficheur

CÂBLAGE

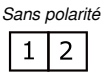
Signaux d'entrée (1 au choix)



Signaux de sortie



Alimentation



20 V DC - 240 V DC
80 V AC - 256 V AC / 50 - 60 Hz

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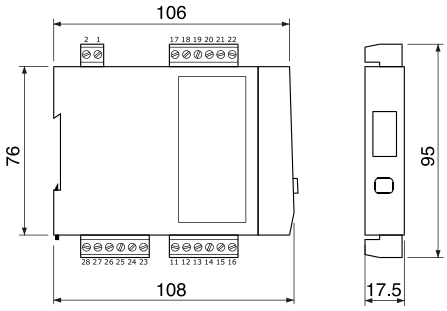
Versatil converter
CUB-233

233

- **1 Input, multi-parameters mA, V, Pt 100, potentiometric, resistor**
- **Supply to the sensor**
- **2 analogue outputs**
- **2 relay outputs**
- **Setting by joystick or PC**
- **Linearization and taring function**
- **Wide range of main supply 80 ... 256 V AC 50/60 Hz; 20 ... 240 V DC**



APPLICATIONS

For most of all use on signal conversion::
- Level measuring probe with potentiometric output
- Level measuring probe, 2-wire, 4-20 mA output
- Temperature probe with Pt 100 sensors or thermocouple
- Zooming on input signal
- Linearization along "up to" 100 points
- Alarming function for all the above sensor

DESCRIPTION

Converter 233 is a great solution for any applications to convert or monitor output signals from sensors.
Both analogue outputs may be set up as mA or mV signals and both relay outputs may be set up all along the scale (thresholds, hysteresis and delay).

TECHNICAL FEATURES

Power supply	0... 256 V AC, 50/60 Hz and 20 ... 240 V DC (no polarity)
Consumption	< 4 VA
Display	LCD screen
Ambient temperature	-10 ... +60 °C
Protection	IP 20
Mounting	Rail DIN 17.5 mm
Connections	4 removable terminal blocks
Programming	Programming through a joystick or a PC

Multi-parameters input:

Current	0...20 or 4...20 mA
Voltage	0... 100 mV or 0 ... 10 V
Resistor thermometer	Pt 100 / Pt 1000, 2-wire or 3-wire sensors
R2-wire resistor	Ranges: 1 kΩ; 5 kΩ; 10 kΩ; 50 kΩ
PTC and NTC sensors	Scales: 1 kΩ; 5 kΩ; 10 kΩ; 50 kΩ; programming with the software BLOG-CUB
Thermocouples	J, K, T, B, R, S, E, NiMo, N, W3/D, W5/C, P
Potentiometric input	From 470 Ω up to 100 kΩ
Power supply to sensor	2-wire or 3-wire sensors: Max. 19V and 26 mA

2 Analogue outputs and 2 relay outputs:

Current	0...20 and or 4...20 mA (Impedance < 700 Ω)
Voltage	0...10 V (Impedance > 2 kΩ)
Relay	Change-over 500 mA / 250 V

CE conformity: The device meets the legal requirements of the current European Directives.

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CODE NUMBERS AND REFERENCES

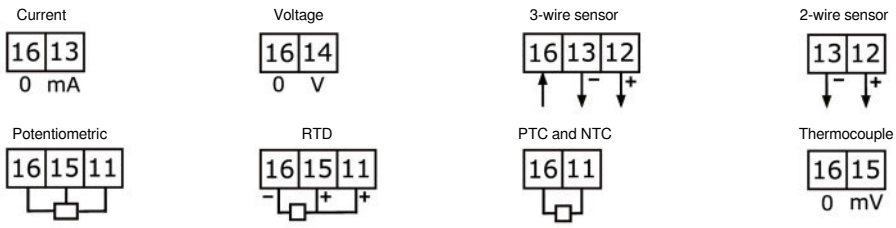
Code	Reference	Description
233 200	CUB-233	Versatil converter
233 205	CUB	Communication interface
233 206	BLOG-CUB	Programming software

FUNCTIONS

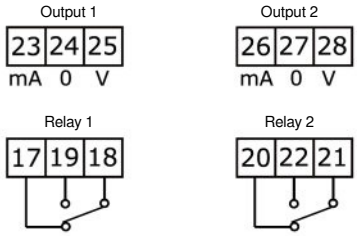
Display unit	LCD, green, non-backlit
Displayed information	Real time input value and as programmed value Outputs as set up values and percentage Relays status
Display adjustment	Lighting display adjustment according to ambient temperature
Input scale factor	Allows a zoom effect on input signal or manual or automatically.
Output scale factor	Allows a zoom effect on input signal and displayed value.
Programming	Programming through a joystick in front, 5 positions
Memory, Min. / Max.	Logging of Min. and Max. measurements
Saved value	Possibility to store at the output, the last measured value in case of sensor failure
Offset	Offset set up on input for any signal type
Taring function	Taring funtionon signal inputs
Simulation	Simulation programme actuates on analogue outputs, relays and display indedently of input value and without disconnecting the sensors neither output connections.
Output signal restrictions	Possibility of limiting the output value High and low limits to set up
Reference junction	The reference junction is insured through a numerical sensor 16 bits
Input safety signal	In case of broken loop input signal, CUB 233 produces a set up value on display and outputs.
Linearization with 100 points	Allows an output signal from a segmented input signal. e.g.: Volume of a cylindrical and horizontal tank vs. height of fluid
Linearization PTC - NTC resistors	Allows to correct the PTC or NTC signal against segmented input signal. (programming only with the software BLOG CUB)
Thresholds	Simple mode or bandwith mode, with positive or negative safety Set up of hysteresis and delay, independently for decreasing or increasing signals. Direct access to thresholds, memory and alarm reset
Alarm reset	Independently on each alarm
Alarm saving	Independently for each alarm
Other functions	Cut Off - 1 or 10 points resolution - Comma position - Filtering - Joystick lock - Contrast adjustment of display screen

ELECTRIC CONNECTIONS

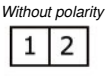
Input signals (1 to choose)



Output signals



Power supply



20 ... 240 V DC

80 ... 256 V AC - 50/60 Hz

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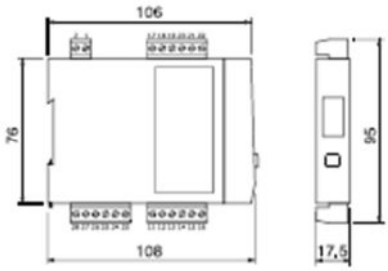
CONVERTITORE UNIVERSALE
CUB 233



1 entrata universale
mA, V, Pt 100, potenziometro, resistenza
• Alimentazione del sensore
• 2 uscite analogiche
• 2 uscite a relè
• Impostazione tramite joystick o PC
• Funzione di linearizzazione e calibrazione
• Potere universale
80 ... 256 V AC 50-60 Hz / 20 ... 240 V DC

APPLICAZIONI

Per tutte le tue applicazioni di conversione e isolamento del segnale:
- Sonde di livello con uscita potenziometrica
- Sonde di livello a 2 fili, loop 4-20 mA
- Sensori di temperatura Pt 100, termocoppia
- Conversione del segnale (effetto ingranditore)
- Linearizzazione speciale (100 punti)
- Semplice allarme per tutti questi sensori

DESCRIZIONE

Il convertitore universale 233 è la soluzione per tutte le applicazioni di conversione e isolamento dei segnali.
È possibile assegnare due uscite analogiche in mA o mV e due uscite relè possono essere impostate sull'intera scala di ingresso (valore, isteresi e tempo di ritardo).

CARATTERISTICHE TECNICHE

Tensione di alimentazione	0 ... 256 V CA, 50-60 Hz e 20 ... 240 V DC senza polarità
Consumo	<4 VA
Visualizza	Schermata di aiuto dell'LCD grafico
Temperatura ambiente	-10 ... + 60 ° C
Classe di protezione	IP 20
Montaggio	su guida DIN 17,5 mm
Connessione	4 morsettiere rimovibili
Programmazione	tramite joystick o PC

Ingresso universale:

Corrente	0-20 o 4-20 mA
Tensione	0-100 mV o 0-10 V
Termometro a resistenza	Pt 100 - Pt 1000, 2 o 3 fili
Resistenza a 2 fili	1 kΩ - 5 kΩ - 10 kΩ - 50 kΩ
Tabella per PTC e NTC	1 kΩ - 5 kΩ - 10 kΩ - 50 kΩ programmabile con il software BLOG-CUB
Termocoppia	J, K, T, B, R, S, E, NiMo, N, W3 / D, W5 / C, P
Potenziometro	Da 470 Ω a 100 kΩ
Alimentazione sensore	Sensore a 2 o 3 fili: massimo 19V e 26 mA

2 uscite analogiche e 2 relè

Corrente	0-20 e / o 4-20 mA (Impedenza <700 Ω)
Tensione	0-10 V (impedenza> 2kΩ)
Relè inverter	500 mA / 250 V

ALLEGATO 7

Certificato di riconoscimento dei requisiti tecnico professionali.

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C.F. PRDCSR54S09I625Q

Barlassina 15 dicembre 2021

AUTOCERTIFICAZIONE

Io sottoscritto *Cesare Ing. Prada* nato a Seregno il *09-11-1954*,

residente in *Barlassina -MB-*, in via *Longoni n.71*,

DICHIARO

di essere regolarmente iscritto all'albo ingegneri della provincia di Monza e della Brianza con numero A343, e di possedere i requisiti tecnico professionali per la redazione del progetto relativo agli impianti di cui al D.M: 22 gennaio 2008 N. 37.

In fede

Cesare Ing. Prada